

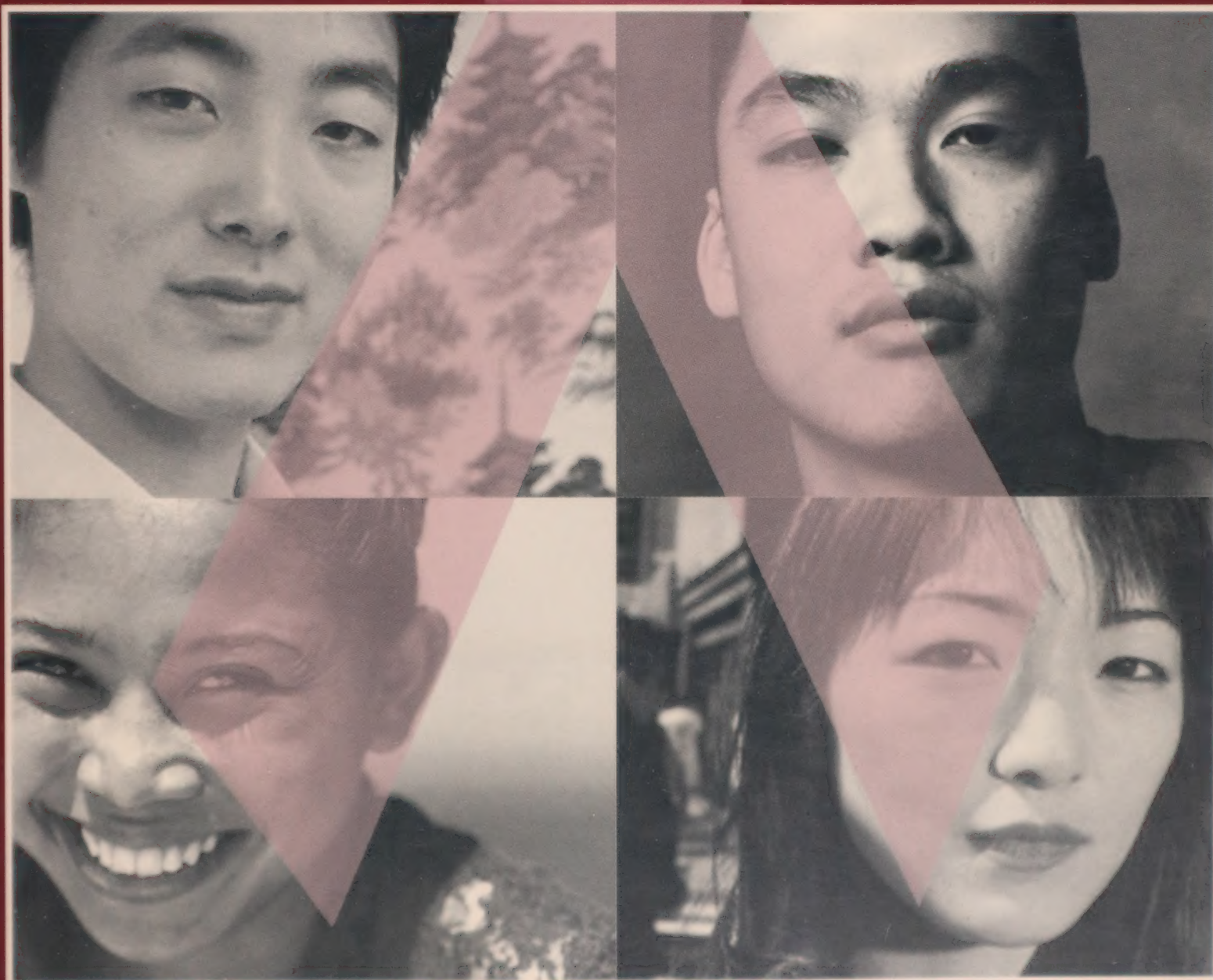
ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

Economic and Social Progress in Jeopardy:

HIV/AIDS

IN THE ASIAN AND PACIFIC REGION

Integrating Economic and Social Concerns,
Especially HIV/AIDS, in
Meeting the Needs of the Region



UNITED NATIONS

~~08349~~

08359

Community Health Cell

Library and Information Centre

367, "Srinivasa Nilaya"

Jakkasandra 1st Main,

1st Block, Koramangala,

BANGALORE - 560 034.

Phone : 553 15 18 / 552 53 72

e-mail : chc@sochara.org

Economic and Social Commission for Asia and the Pacific

Economic and Social Progress in Jeopardy:

HIV/AIDS

IN THE ASIAN AND PACIFIC REGION

Integrating Economic and Social Concerns,
Especially HIV/AIDS, in
Meeting the Needs of the Region



UNITED NATIONS

New York, 2003

ST/ESCAP/2251

UNITED NATIONS PUBLICATION

Sales No. E.03.II.F.24

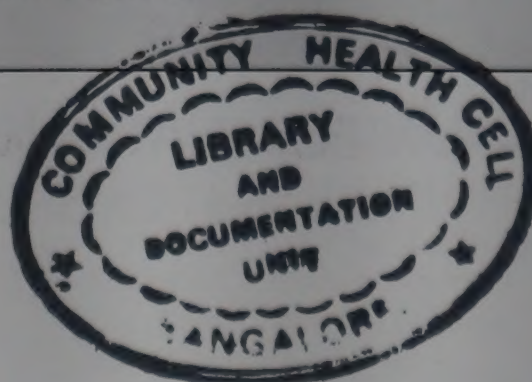
Copyright © United Nations 2003

ISBN: 92-1-120164-0

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

This publication has been prepared by the Health and Development Section, Emerging Social Issues Division, ESCAP secretariat.

It may not be reproduced or reprinted without the express permission of the United Nations.



MESSAGE FROM THE EXECUTIVE SECRETARY

At its first opportunity following the United Nations General Assembly special session on HIV/AIDS, the Commission, at its fifty-eighth session in April 2002, adopted as its theme topic for the fifty-ninth session "Integrating economic and social concerns, especially HIV/AIDS, in meeting the needs of the region".

Never before in the region's development history have so many lives depended on such life-and-death decisions as those now facing the Governments of Asia and the Pacific. These decisions are both difficult and troubling. How should overall development strategies be adjusted to incorporate action against the spread of HIV/AIDS? With over 600 million young people, all highly vulnerable, what is the priority of resource allocation for targeting this group that represents the promise of Asian and Pacific societies? How necessary is it to divert national resources immediately to significantly strengthen a prevention, treatment, care and support continuum? Should Governments promote compassion and care for people living with HIV/AIDS and reduce the stigma and discrimination against them?

These issues are troubling because they touch sensitivities that have seldom been openly discussed in Asian and Pacific societies – private thoughts and behaviour related to sexuality, and issues of illegal behaviour. These issues make every one of us uncomfortable because the search for solutions requires a fundamental questioning of established positions. It requires that we break out of mental boxes, that we dare to act with courage on matters that are taboo.

And yet the HIV/AIDS pandemic has already crept into our societies, even as debates continue over whether or not to acknowledge the existence of factors that cause its entry and fuel its spread.

HIV can infect anyone and HIV/AIDS affects everyone. The health consequences of infection are well known. Less appreciated is the impact of HIV/AIDS on individuals and households in terms of

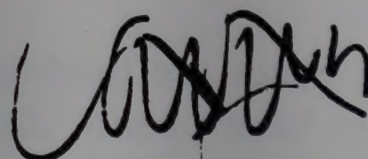
falls in incomes and standards of living. If left unchecked, the epidemic has the potential to reverse the social and economic progress achieved by most countries and territories in the region over the past five decades.

With the prospect that infection rates will increase unless immediate action is taken, Governments in the region are faced with hard social, political, ethical and economic choices, which go far beyond the purely medical ones.

To stem the tide of the pandemic, we need political commitment and will, at the highest level of government, to ensure that adequate resources are available to support comprehensive, strategic and expanded responses on HIV/AIDS prevention, treatment, care and support. We also need the understanding and commitment of everyone in government, and in civil society, regardless of rank and status.

This study outlines a number of policy choices for Government consideration.

The peoples of the Asian and Pacific region, including people living with HIV/AIDS, will look back upon this day as a moment of opportunity. It is our collective responsibility to rise to our moral duty at this historic juncture. Let us dare to join in saving millions from certain death.



Kim Hak-Su

Executive Secretary
ESCAP

ACKNOWLEDGEMENTS

The Economic and Social Commission for Asia and the Pacific decided at its fifty-eighth session that the theme topic for the fifty-ninth session, in April 2003, would be "Integrating economic and social concerns, especially HIV/AIDS, in meeting the needs of the region".

Under the overall direction of the Executive Secretary of ESCAP, Mr. Kim Hak-Su, and of the in-house Inter-thematic Team, the Emerging Social Issues Division prepared a detailed outline for this study. The Advisory Committee of Permanent Representatives and Other Representatives Designated by Members of the Commission reviewed the study outline.

The Executive Secretary and the Inter-thematic Team closely guided the preparation of the theme study. Valuable comments and advice were provided by Mr. Cengiz Ertuna, Ms. Nanda Krairiksh and members of the Inter-thematic Team: Mr. Jerry Huguet, Mr. John Moon and Mr. Yap Kioe Sheng.

Ms. Hiroko Tanaka, under the guidance of Ms. Nanda Krairiksh, prepared a study outline. Mr. Thomas Schindlmayr prepared a preliminary draft of parts of the study.

Mr. Michael Chai, Mr. Amitava Mukherjee and Mr. Satyanarayan Sivaraman prepared the study as it stands in its final form. Mr. Bruce Ravesloot conducted supplementary research on data, converted them into more reader-friendly form and assisted in extensive reference checking. Mr. John Loftus assisted in editing parts of the study. Ms. San Yuenwah coordinated theme study preparations and pre-edited drafts before they were submitted for formal editing.

Among other members of the ESCAP secretariat who were consulted on different sections of the study pertaining to their particular areas of expertise were Mr. Aynul Hasan, Mr. Hiren Sarkar and Mr. Bhakta Ghubaju.

The theme study also benefited from the specialized expertise of senior colleagues in the United Nations system, particularly the following: Mr. Sandro Calvani (UNODCCP), as Chairperson, HIV/AIDS Steering Group for the fifty-ninth annual session of UNESCAP; Mr. Hakan Bjorkman and Ms. Lee-Nah Hsu (UNDP); Mr. Sheldon Shaeffer, Dr. Ko-Chih Tung and Mr. Jan W. de Lind Wijngaarden (UNESCO); Mr. Robert Bennoun (UNICEF); Mr. Gunnar Walzholz (ILO); and Dr. Bjorn Melgaard and Mr. Richard Kalina (WHO).

Throughout the research and drafting of the study, UNAIDS made a major contribution through its overall technical guidance on the scope, content and main messages. The ESCAP secretariat acknowledges with deep appreciation the guidance of Mr. Tony Lisle, UNAIDS SEAPICT and particularly of Dr. Swarup Sarkar, who generously shared his wealth of insights, data and information.

Appreciation is also due to UNAIDS Geneva colleagues, especially Mr. Hein Marais, who contributed style editing of parts of the study and useful comments, as well as Mr. Neff Walker, who contributed regional data and interpretation. Mr. Tim Brown (East-West Center, University of Hawaii/Family Health International) and Mr. John Stover (Working Group of the UNAIDS Economic Reference Group) advised on facts, figures and interpretation.

The ESCAP secretariat would also like to thank Dr. Tia Phala, Secretary-General, National AIDS Authority, Cambodia, for his contributions on HIV/AIDS in the development context of the Asian and Pacific region.

Ms. Karen Schmitzberger and Mr. Erich Monitzer of Fine Line, Vienna, contributed the cover design for the theme study publication to mark the significance of the fifty-ninth annual Commission session in advancing regional action on HIV/AIDS issues.

CONTENTS

	<i>Page</i>
MESSAGE FROM THE EXECUTIVE SECRETARY	iii
ACKNOWLEDGEMENTS	v
INTRODUCTION	1
 <i>Chapter</i>	
I. SUSTAINING ECONOMIC AND SOCIAL GOALS	5
A. Achievements in the Asian and Pacific region	5
B. Challenges in the Asian and Pacific region	20
C. Conclusion	28
II. HIV/AIDS: WHERE IS THE PANDEMIC HEADED IN THE ASIAN AND PACIFIC REGION?	29
A. HIV/AIDS – into the third decade	29
B. HIV/AIDS in the Asian and Pacific region	30
C. Conclusion	45
III. PEOPLE’S VULNERABILITY: CHALLENGE TO LEADERSHIP	47
A. Transmission trends and vulnerable groups	47
B. Young people – key to controlling the epidemic	68
C. Children, women and older persons	71
D. For whom the bell tolls	77
E. Conclusion	78
IV. SAVING OUR FUTURE	83
A. The economic cost of the HIV/AIDS pandemic	83
B. Prospects and choices	91
C. Commitment of resources to save our future	100
D. Conclusion	105

CONTENTS *(continued)*

	<i>Page</i>
V. POLICY OPTIONS	109
Introduction.....	109
A. Policy environment.....	110
B. Resource generation and flow	119
C. Institutional mechanisms	122
D. Action on commitments	125
E. Scaling up of interventions	126
F. Epilogue	127
REFERENCES	128

LIST OF BOXES

	<i>Page</i>
Box I.1. Gender and prosperity	7
Box I.2. The magic of land reform	9
Box I.3. Educated mothers, healthy children	10
Box I.4. Adult literacy	13
Box I.5. A tale of six countries	16
Box I.6. Women and the crisis	27
Box II.1. Papua New Guinea	35
Box II.2. HIV/AIDS and southern Africa's food crisis	42
Box II.3. The ART of living	43
Box III.1. Prevention works among IDUs!	50
Box III.2. Success in two cities	52
Box III.3. Prevention works among sex workers	55
Box III.4. Shifting trends, changes in vulnerability	59
Box III.5. Success in reaching the unreached	60
Box III.6. Seafarers – South-East Asia and the Pacific	62
Box III.7. Success in dealing with mobile populations	64
Box III.8. Uniformed personnel: high-risk behaviour	66
Box III.9. Projects in the barracks yield results	66
Box III.10. People behind bars run interventions	67
Box IV.1. Prevention interventions and care and support activities of the expanded response programme	95
Box IV.2. Declaration of Commitment on HIV/AIDS	96
Box IV.3. The case of Thailand	97
Box IV.4. The case of Cambodia	106
Box V.1. Selected millennium development goals and the effect of HIV/AIDS	111

LIST OF TABLES

	<i>Page</i>
Table III.1. Characteristics of the HIV/AIDS epidemic in selected countries/areas of the ESCAP region	74
Table IV.1. Infections that can be averted between 2002-2010	93

LIST OF FIGURES

	<i>Page</i>
Figure I.1. GDP growth rates, world and selected regions, 1961-1996	6
Figure I.2. Incidence of extreme poverty by subregion, 1990-1998	7
Figure I.3. Infant mortality rates in Asia and its most populous countries	10
Figure I.4. Life expectancy at birth in Asia, by subregion	11
Figure II.1. Percentage of HIV seroprevalence in the adult population by region of the world	30
Figure II.2. Estimated HIV/AIDS prevalence in selected countries in the ESCAP region, 2001	31
Figure II.3. Indonesia: injecting drug use and unsafe sex	32
Figure II.4. HIV/AIDS prevalence, new infections and deaths in the ESCAP subregions, 2001	33
Figure II.5. Serious localized epidemics in Asia and the Pacific	41
Figure III.1. Rapid prevalence rate increase among sex workers in China and Viet Nam	54
Figure III.2. Critical coverage to reduce prevalence	57
Figure III.3. MSMs in Cambodia: sexual contact between men and different partners in a period of six months	58
Figure III.4. State-wise percentage of migrants to Maharashtra, India	63
Figure III.5. Estimated number of young people, aged 15 to 24, living with HIV/AIDS (end-2001)	69
Figure III.6. Gap between young people's knowledge and their behaviour	70
Figure III.7. Thailand: changing routes of transmission	76

LIST OF FIGURES *(continued)*

		<i>Page</i>
Figure IV.1.	Projected new adult infections given the current degree of intervention and timely scaling-up of a package of comprehensive interventions	92
Figure IV.2.	Number of adult infections dependent on time of initiation of interventions	94
Figure IV.3.	Thailand: the benefits of prevention	98
Figure IV.4.	HIV/AIDS spending in programme countries, 1996-2001	102
Figure IV.5.	Regional distribution of official development assistance for HIV/AIDS in selected donor countries...	102
Figure IV.6.	Global resources needed by region	104
Figure IV.7.	Asia and the Pacific: estimated (2002) and projected (2007) financing requirements for prevention, orphan care and treatment	105
Figure V.1.	Meeting HIV/AIDS as a development challenge	112

GLOSSARY OF SELECTED ACRONYMS

AIDS	acquired immune-deficiency syndrome
ART	antiretroviral treatment
ARV	antiretroviral
HAART	highly active antiretroviral therapy
HIV	human immuno-deficiency virus
IDUs	injecting drug users
MSMs	men who have sex with men
PLWHAs	people living with HIV/AIDS
STIs	sexually transmitted infections

INTRODUCTION

*Deal With Things In Their State Of Not-Yet-Being,
Put Them In Order Before They Have Got Into Confusion,
For 'The Tree Big As Man's Embrace Began' As A Tiny Sprout,
The Tower Nine Storeys High Began With A Heap Of Earth,
The Journey Of A Thousand Leagues Began With What Was
Under The Feet.*

Lao Zi in *Dao De Jing*

In the two decades since HIV/AIDS was first discovered, it has gone from being an enigmatic, uncommon disease to a less mysterious, rampant pandemic. No region has been spared its impact. Few are unaware of its presence.

The spectre of HIV/AIDS is already here, casting a dark shadow over the Asian and Pacific region. The epidemic is a clear and present danger. It threatens to unravel achievements gained. It also threatens to stall future progress.

At the same time, in many parts of the region, the response to HIV/AIDS is still driven by widespread lack of understanding of its true implications. In too many cases, unfounded assumptions and myths dictate personal and public attitudes and behaviour. Can this region afford the consequences of not addressing this issue?

The Asian and Pacific region now accounts for 1 in every 5 new HIV infections worldwide. In 2002, AIDS claimed approximately half a million lives in the region. In the same year, an estimated 1 million adults, children and young people acquired HIV. In all, over 8 million people were living with the virus in the region by the end of 2002, of whom 2.6 million were young people aged 15 to 24.

So where do we begin in the search for solutions? The answer is simple: from within the region, by looking at our own recent development path, and by looking beyond the region for lessons that have emerged where the pandemic is more advanced or where preemptive action has been rapid and comprehensive.

In the past half-century, the Asian and Pacific region has emerged as a powerhouse of the world economy. It has transformed itself from the servitude of a colonized, backward past to the dignity of a vibrant, dynamic present. This is a transformation made possible largely through a judicious balance of social concern and economic development.

Given the many ways in which HIV/AIDS proliferates and affects our societies, the solutions too need a multi-pronged approach. The region's experience in marrying social and economic policies is vital to tackling the pandemic in all its dimensions.

Chapter I of this theme study highlights the best-known examples of development success in the ESCAP region – the “tiger” economies. The “tigers” became leaders in the world economy on a rich diet of social development in their years of infancy. The key role of State investments in public health and education is studied and lessons are drawn.

Chapter I also looks at the unfinished tasks and emerging challenges before the region. They are examined to understand the broader development context and implications of a HIV/AIDS pandemic in the region, as also what actions would be required to avert the catastrophe that such a pandemic would wreak.

The Commission's timely wisdom in taking up HIV/AIDS as a theme topic for its fifty-ninth annual session becomes even clearer in chapter II of the study. The status and trends of the HIV/AIDS pandemic, both globally and in the ESCAP region, are analysed. Several unfounded assumptions about HIV/AIDS that hamper the development of effective policies and intervention are examined. Facts about the HIV/AIDS pandemic, the path of its progression and the accumulated experience of affected countries are explained.

While the figures alone are sufficient cause for concern, the study goes beyond abstract numbers to highlight the vulnerability of diverse groups (chapter III). Everyone is vulnerable. At the same time, certain groups are more vulnerable because of circumstances that have influenced their choices and shaped their behaviour.

At the heart of people's vulnerability are issues hitherto seldom discussed in policy-making forums, but which must now be openly and frankly discussed in a courageous search for fundamental, long-term solutions to save our societies. One such issue is how people

fulfil a basic personal need related to their sexuality. Another issue is how the dynamics of gender inequality tip the balance in favour of the spread of the virus. A third issue is that of injecting drug use and its nexus with sexual behaviour. The impact of the HIV/AIDS pandemic on young people, women, children and older persons is also discussed in chapter III.

Chapter IV describes the enormous costs on Asian and Pacific societies, if the correct responses were not to be quickly put in place, while the pandemic is still at a fairly early stage in this region. Chapter IV focuses attention on the implications of the pandemic for key aspects of development, from human resources development to agriculture and business.

The chapter outlines both the costs of inaction and the costs involved in meeting head on the development challenge posed by the spread of HIV/AIDS. Given the immediacy of the responses that need to be mounted across the Asian and Pacific region, chapter IV looks into the financial resources required to take on the HIV/AIDS challenge on a pragmatic, day-to-day basis.

Building on the analyses in chapters I through IV, the contours of what needs to be done emerge in chapter V. Chapter V spells out the “next steps” that Governments of the region could take. It contains policy options, both long- and short-term, to be adopted to keep societies of this region prosperous and healthy. Chapter V presents choices that could stave off one of the greatest threats that over half of humanity faces today, living in Asia and the Pacific.

Overall, this theme study is designed to serve as a policy tool. It uses the wealth of knowledge and research available on the subject of HIV/AIDS. UNESCAP has drawn on its own work on the subject and on the experiences of United Nations partners, such as UNAIDS and its cosponsors.

The theme study has two companion volumes: *Saving our Future: Multiministerial Action Guide*; and *HIV/AIDS Prevention, Care and Support: Stories from the Community*. All three complement each other and together form a set to facilitate reflection by policy makers towards the development of meaningful and comprehensive national responses to the epidemic in their respective countries and territories.

Importantly, the study examines the HIV/AIDS epidemic as a developmental challenge that concerns all sectors of government and society, not just the medical community alone. This is because the underlying causes that promote the spread of HIV/AIDS are, in the first place, development problems. These problems need to be addressed together with the proximate factors that fuel the spread of the virus.

The theme study for the fifty-ninth Commission session therefore calls for a shift in the paradigm of the Asian and Pacific response to HIV/AIDS: from a predominantly “medical health” paradigm to a “development +” paradigm that encompasses economic and social development, including health.

CHAPTER I

SUSTAINING ECONOMIC AND SOCIAL GOALS

*"Knowing is not enough; we must apply.
Willing is not enough; we must do."*

Goethe

In the final decades of the twentieth century, Asia and the Pacific registered the highest economic growth rates in the world, a feat that is now well known. Less commonly known is the fact that the success rested on a foundation of State-led policies that promoted improved health and education, skills development and greater equity in access to land, capital and new technologies. These impressive achievements in social development were the prime catalysts for high economic growth.

This chapter highlights the achievements of the "tiger" economies of the Asian and Pacific region as examples of the positive links that can be forged between policies that promote social development and those that encourage economic growth. In particular, it examines how the integration of long-term economic policies with social priorities, such as health and education, has helped to spur admirable development in the region.

The chapter also surveys some of the challenges that still confront the region, not least the uneven nature of its development. In addition, the experience of the Asian financial crisis is reviewed as a reminder that vigilance is required to guard against setbacks and crises that can reverse the gains of the past.

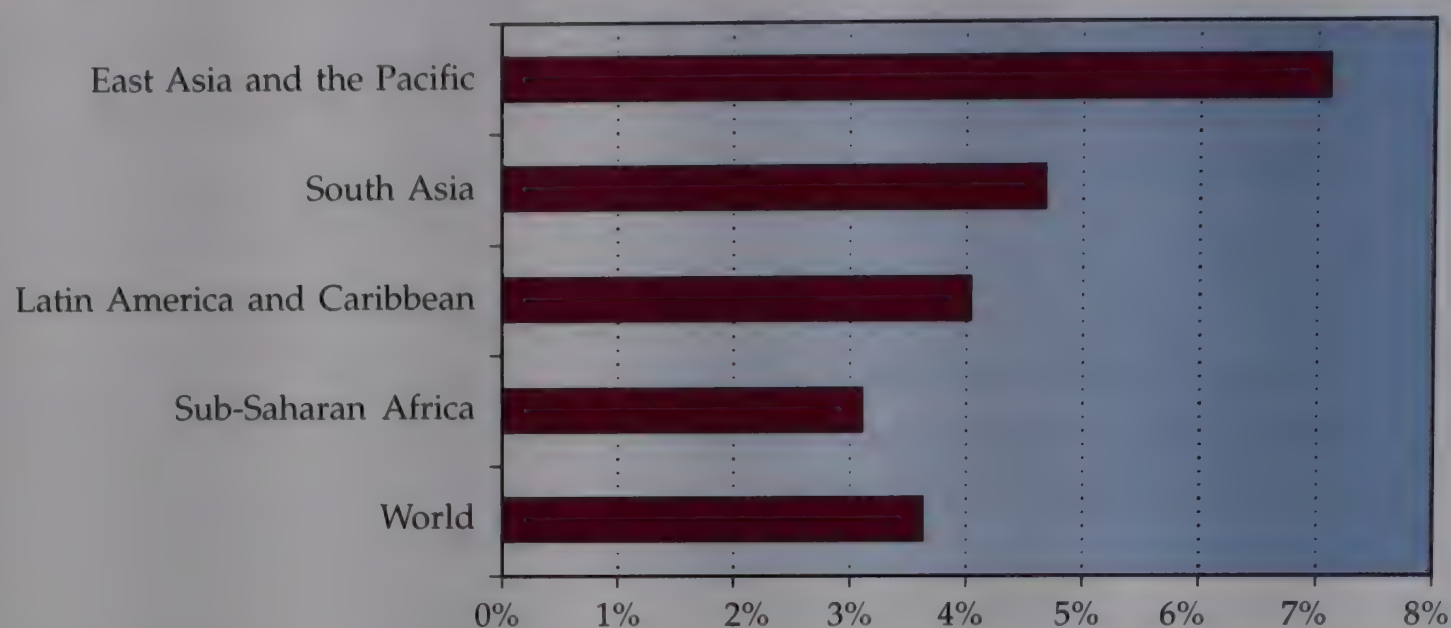
A. Achievements in the Asian and Pacific region

1. Economic progress

(a) High growth rates

The economic growth of Asia and the Pacific occurred rapidly in the last three to four decades of the twentieth century. During that period, East Asia and the Pacific grew faster than any other region in

Figure I.1. GDP growth rates, world and selected regions, 1961-1996



Sources: ICSEAD (International Centre for the Study of East Asian Development), "Recent trends and prospects for major Asian economies", *East Asian Economic Perspectives*, vol. 10 (Special Issue, February 1999); Danny, Leipziger and Vinod Thomas, "An overview of East Asian experience, in Danny Leipziger, ed., *Lessons from East Asia* (Ann Arbor, Michigan, University of Michigan Press, 1999 and World Bank, *World Development Indicators 2000*. (Washington, 2000), available on CD-ROM (as quoted in M.G. Quibria, "Growth and poverty: lessons from the East Asian miracle revisited" (<http://www.adbi.org/PDF/wp/rp33.pdf>, February 2002).

the world, registering almost twice the average global rate of growth (Figure I.1).

Between 1961 and 1996, the longest period over which comparable data are available, the newly industrialized economies (NIEs) of Hong Kong, China; the Republic of Korea; Singapore; and Taiwan Province of China grew at more than 8 per cent, while South East-Asian economies grew at about 7 per cent annually. This growth translated into a remarkable rise in overall economic prosperity.

In 1960, the gross national product (GNP) per person in the NIEs as a whole was a mere 16 per cent of that in the United States; by 1995, it had ballooned to 77 per cent. In the South-East Asian economies alone, over the same period, the GNP per person increased from only 4 per cent of that in the United States to 10 per cent. It added up to a spectacular performance: in roughly three decades, the average income levels of the NIEs rose more than ninefold.

With the exception of several European countries in the immediate post-Second World War period, growth rates of such magnitude – and duration – are unprecedented in recent history. In a single generation, NIEs such as Hong Kong, China; the Republic of Korea; Singapore; and Taiwan Province of China achieved what had taken the advanced economies of Western Europe several centuries to do (Quibria 2002, p. 1).

(b) Diminishing poverty

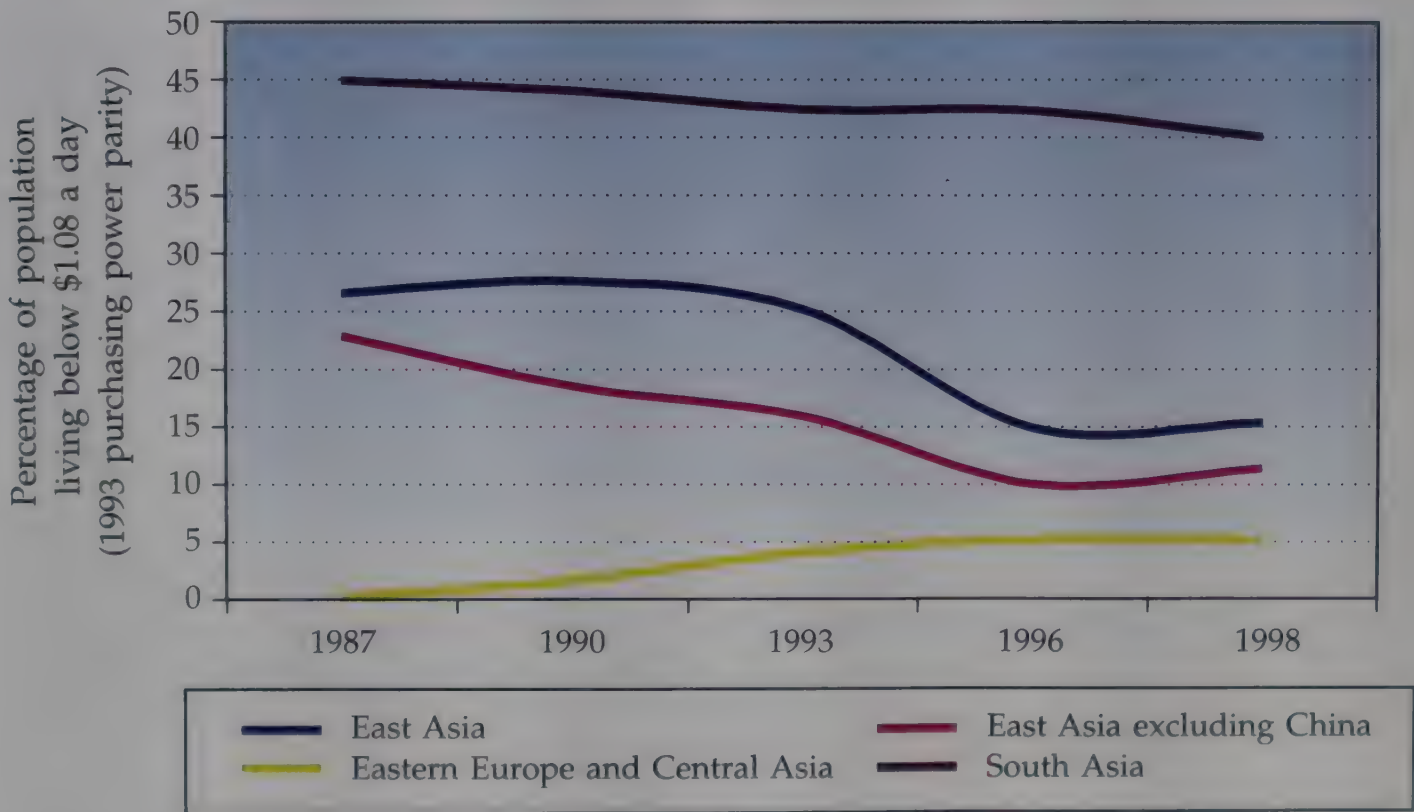
Among the most obvious gains was the overall decline in poverty levels. In the 1960s, poverty had been pervasive in the region. By the 1990s, it had been considerably reduced, though by no means entirely eliminated. South-East Asian countries such as Indonesia, Malaysia and Thailand made dramatic strides in poverty reduction. By the mid-1990s, in both Indonesia and Thailand, a quarter as many people were living under the US\$ 1 per day poverty line, compared with the mid-1970s. In Malaysia, the incidence of poverty had fallen to a low of between 1 and 2 per cent by the beginning of 1998 (World Bank n.d.). In the ESCAP region as a whole, poverty (measured by income/consumption levels) declined in the last decade of the twentieth century (figure I.2), despite the opposite

Box I.1. Gender and prosperity

Reducing the "gender gap" in health and education decreases individual poverty and encourages economic growth (UNFPA 2002, p. 8). A comparison between East and South Asia between 1960 and 1992 shows that South Asia started with wider gender gaps in health and education and closed them more slowly. If gender gaps had closed at the same rate in the two subregions, South Asia would have increased its real GDP by close to 1 per cent.

Source: UNFPA, *The State of World Population 2002* (New York, 2002).

Figure I.2. Incidence of extreme poverty by subregion, 1990-1998



Source: Based on World Bank, *World Development Report 2000/2001: Attacking Poverty* (New York, Oxford University Press, 2001).

trend in Central Asia. Poverty reduction in East and South-East Asia, China and the Pacific was quite significant: the percentage of the population living below the poverty line fell from 27.6 per cent in 1990 to 15.3 per cent in 1998. In South Asia, poverty reduction has been considerably slower. The incidence of poverty declined from 44 per cent of the population to 40 per cent in the same period. There have been exceptions. For example, in Central Asia, poverty rates rose from a very low 1.6 per cent to 5.1 per cent, largely owing to the transition from a central planning regime (where the State guaranteed full social protection) to a market economy (where a large share of social services has been commodified).

(c) Disparities

The reduction in poverty in the region, though impressive, has not been uniform even within specific countries. Most obvious are the enduringly wide disparities between urban and rural areas. Of the over 800 million people estimated in Asia and the Pacific who were living on less than US\$ 1 per day in 1998, the majority – fully 560 million – were living in rural areas (ESCAP 2002a, p. 23).

Also evident are other disparities in income levels, which correspond to gender, ethnicity, caste and even geographical location. Farmers in rain-fed areas, forest dwellers, highlanders and indigenous people constitute the majority of poor people in many countries.

2. Social progress

The economic success stories of Asia and the Pacific developed on strong social foundations that had been established well before economic growth commenced. Improved health and access to education enabled much larger sections of society, and not least the poor, to contribute to the growth process and participate in and benefit from the opportunities that followed.

(a) Improved health and life expectancy

Asia achieved dramatic reductions in infant and child mortality rates in the second half of the twentieth century. Life expectancy rose notably as access to income, education, health-care and sanitation improved.

Overall, the infant mortality rate in Asia (at 59 deaths per 1,000 live births in the year 2000) is less than one third that in the early 1950s (figure 1.3). In countries such as India and Pakistan, infant mortality rates have tumbled. The success of immunization

Box I.2. The magic of land reform

The progressive reform of land ownership in rural areas has been key in the eclectic ensemble of factors that have yielded success in South-East and East Asian economies. Extreme poverty is predominantly a rural phenomenon in Asia and the Pacific. Although rural poverty trends vary considerably from country to country, it is estimated that in many countries 80 to 90 per cent of the poor live in rural areas.

In all developing regions, unequal and inadequate access to land is one of the primary causes of rural poverty. Countries that have achieved significant reductions in poverty levels over the past decades have done so largely by making policy decisions that favour the rural poor. Radical land redistribution, the elimination of absentee land ownership, resettlement and the imposition of land ownership ceilings have served as vigorous catalysts for empowerment and for opening up new opportunities to the rural poor across much of East Asia and parts of South-East Asia:

- In the 1950s, the Republic of Korea and Taiwan Province of China followed Japan's example and introduced reforms that displaced landlords, set limits on land ownership and gave tenants a stake in the land.
- From 1960 to 1970, hundreds of thousands of smallholders were resettled on large-scale plantations in Malaysia and given titles to individual plots. The result was a marked reduction in the inequality of land holding.
- Indonesia started out with a more unequal land ownership structure, but it too embarked on a major resettlement programme over the same period, with plantations broken up and parcelled out to smallholders.
- China and Viet Nam broke the grip of landlords by collectivizing landholdings.

As a result of such reforms, East Asia has attained one of the world's most equal systems of land ownership. The Gini coefficient for land distribution is 0.33, compared with 0.70 for Latin America.

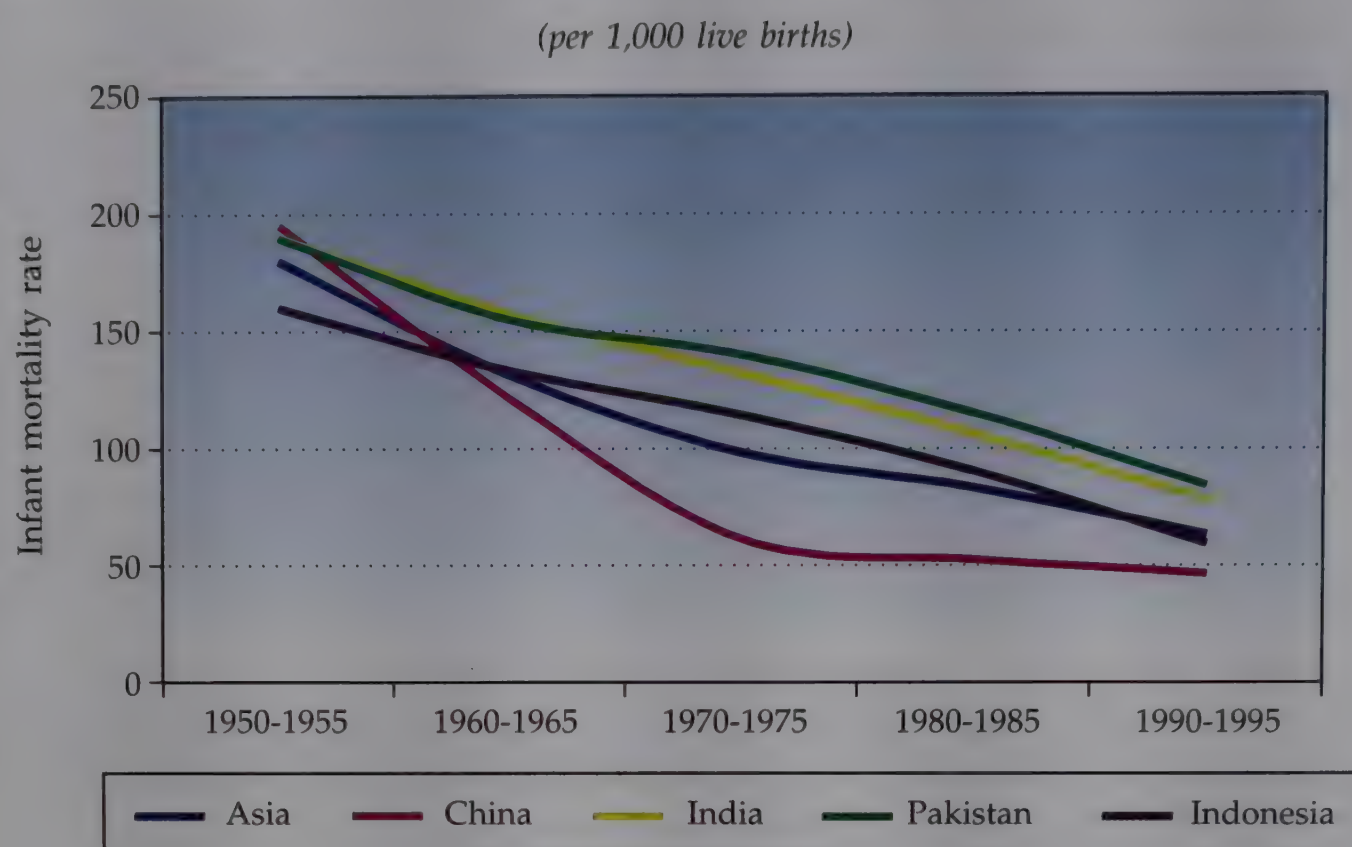
Major benefits accrue from equitable rural land redistribution. For example, it:

- Empowers the rural poor by giving them direct access to a basic resource, namely, land.
- Provides farmers with incentives to make long-term investments.
- Improves the availability of food at the household level.
- Makes rural development more participatory.
- Encourages competition by making it more difficult for rural elites to corner the market.

However, land reform tends to work best in tandem with other measures, including State investment in rural infrastructure, access to markets and credit, public investment in agricultural research and equitable international trade agreements.

Sources: IFAD (International Fund for Agricultural Development), *IFAD Strategy for Rural Poverty Reduction in Asia and the Pacific* (Rome, IFAD, 2002); and Oxfam International, *Growth with equity: an agenda for poverty reduction* (London, OXFAM, 1997).

Figure I.3. Infant mortality rates in Asia and its most populous countries



Source: United Nations, *World Population Prospects: The 2000 Revision. Volume I: Comprehensive Tables* (United Nations publication, Sales No. E.01.XIII.8, pp. 646).

campaigns and health initiatives often as part of wide-scale maternal and child health-care programmes and continued improvements in living standards remain factors in this decline.

Average life expectancy in the region has risen as a result. The average life expectancy at birth in Asia has increased by close to 60 per cent since the early 1950s. This translates into an additional 26

productive years for the average person. Bangladesh, India and Indonesia saw life expectancy grow by 22, 24 and 28 years, respectively, in the past half century (United Nations 2001a, pp. 522f).

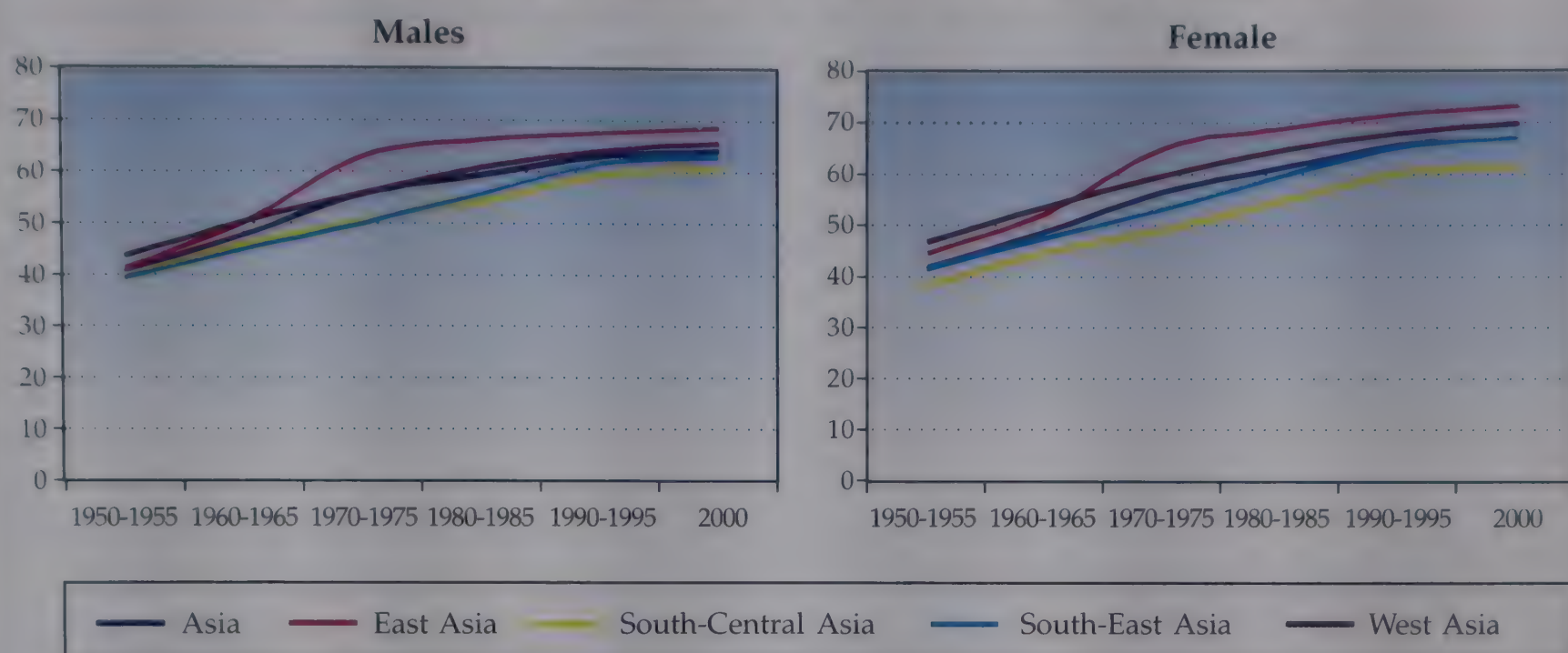
Such steep rises in life expectancy rank among humankind's great achievements. In the Asian and Pacific region, they were based on significant public health

Box I.3. Educated mothers, healthy children

Women are the most direct caregivers of children in the home. Many child survival programmes have therefore focused on improving women's education. Higher female literacy rates in turn increase women's access to these outreach efforts, as well as their overall ability to remain informed about issues vital to their children's survival. Therefore, increasing female literacy rates improves childhood survival.

Source: Amar Hamoudi and Jeffrey Sachs, *Economic consequences of health status: a review of the evidence*, Center for International Development Working Paper No. 30 (Boston, Harvard University, December 1999).

Figure I.4. Life expectancy at birth in Asia, by subregion



Source: United Nations, *World Population Prospects: The 2000 Revision. Volume I: Comprehensive Tables* (United Nations publication, Sales No. E.01.XIII.8, pp. 624-629).

advancements such as better access to clean drinking water, improved sanitation and expanded immunization of children, as well as improvements in nutrition. This progress was the fruit of wider improvements in socio-economic conditions, accompanied by progress in poverty reduction.

Furthermore, in the 1950s and 1960s, many infectious diseases, such as malaria, cholera and tuberculosis, were increasingly brought under control thanks to active interventions by national Governments and multilateral bodies such as the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). The development and widespread introduction of new drugs and medical technologies made possible greater control over the spread of these diseases, against a backdrop of concerted public education campaigns.

Population and health policies also had a major influence in shaping the region's demographic transformation (ESCAP 2002d, p. 3). National family planning programmes originated in South Asia. Starting with a bold initiative in India that launched the world's first national family planning programme in 1952, such programmes were soon adopted elsewhere in the region.

China, the world's most populous country, also made significant strides in family planning. The impetus for launching these programmes was the conviction that unchecked population growth would weaken national development (ESCAP 2002d).

In the early 1970s, the sharp reduction in infant and child mortality caused population growth rates to peak. About 35 years ago, the population growth rates in Asia and the Pacific reached their peak of 2.4 per cent per annum and have been declining ever since. The rate is currently about 1.3 per cent per annum and is expected to go below 1 per cent by about 2015 (ESCAP 2002e, p. 2).

(b) Primary and secondary education

The economic and socio-cultural trends of the past 25 years have affected the levels of primary and secondary school enrolment, as well as gender equality in education. Progress is being made throughout the region, as countries recognize education as a high national priority that is integral to economic development and improvements in the quality of life.

It is highly likely that, by the year 2015, the region will have moved closer to the millennium development goal of ensuring that children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girls and boys will have equal access to all levels of education. Recent trends in overall gross enrolment ratios (GERs), which express the number of pupils at a given level of schooling relative to the total number of children in the relevant age group, for primary schools in Asia and the Pacific, point to a continued increase. From 1975 to 2000, South and West Asia saw GERs increase by 29 per cent, while progress in East and South-East Asia was about 10 per cent. Unfortunately, the economic malaise and erosion of social infrastructure has affected enrolment levels in the countries of Central Asia; there, primary school GERs fell by almost 8 per cent between 1985 and 1995 (ADB 2001, p. 17).

Some countries have moved energetically to increase school attendance and redress gender inequalities. As early as the 1970s, the Republic of Korea embarked on a major drive to achieve universal enrolment, abolishing primary school fees, expanding teacher-training and building new schools. By the mid-1980s, over 90 per cent of the country's children were in school (ESCAP 2002a, p. 33). The Government of India has encouraged separate girls' schools where necessary, provided scholarships to female students in several states and instituted free tuition for girls (UNESCO 2001). In Pakistan, all new primary schools are required to attain the ratio of 60 girls to 40 boys and proportions of 70 per cent female teachers to 30 per cent male instructors (UNESCO 2000b). In Bangladesh, a 10-year government initiative offering families food as an incentive for educating their children has been implemented in approximately 5,000 schools. The programme has yielded a large improvement in attendance, with almost 15 per cent more girls attending classes than before (UNFPA 2002, p. 48).

However, progress in extending secondary education has been more uneven. Girls' secondary schooling is virtually universal in the Republic of Korea, while enrolment rates in Kazakhstan, Kyrgyzstan and Uzbekistan, though still impressive, have deteriorated since 1990. The Philippines and Thailand also are above the mean. Enrolment rates at the secondary level generally increased between 1975 and 1995, with extremely rapid progress in countries such as Indonesia, where the share of enrolled secondary school children more than doubled to 48 per cent during the period (ADB 2001, p. 16).

Box I.4. Adult literacy

In contrast to the impressive headway made in extending primary and secondary education, improvements in adult literacy rates have proved tougher to achieve. According to the most recent data available, of the 862 million illiterate people world-wide, around 606 million are living in the Asia-Pacific region, fully 70 per cent.

In addition, gender remains a major determinant of adult literacy. In South Asia, there are 25 per cent more illiterate women than men, while in East Asia and the Pacific that gap has narrowed to less than 13 per cent. Disparities in literacy rates and literary attainment also vary greatly between countries.

Nevertheless, important progress has been made in some countries, for instance India, where the latest decennial census for 2001 indicates that during the previous decade literacy rates had increased by 10 per cent and that gender disparities in access to literacy had decreased by 7 points; for the first time since independence, the absolute numbers of illiterates had decreased by 32 million persons. China, in spite of a 16 per cent increase in the adult population, has recorded a decrease in the number of adult illiterates from 182 million to 153 million, a reduction of 18.8 per cent.

Source: UNESCO, *EFA Global Monitoring Report, 2002: Is the World on Track?* (Paris, UNESCO, 2002).

In five countries (China, Indonesia, Malaysia, Philippines and Republic of Korea), more than half the children of secondary school age were enrolled. In many countries, however, these achievements tend to benefit boys more than girls. In particular, the gender gap is wider at the secondary level than at the primary level. In South Asia, women on average accumulate only half as many years of education as men. And in secondary school, boys outnumber girls by five to three.

It needs to be emphasized that the Dakar Framework for Action, Education for All also stipulates that the learning needs of all young people should be met through learning and life skills programmes. It also stresses the importance of life skills in connection with the improvement of the quality of education. Direct measures of skills can be better predictors of successful participation in society than other indicators such as education credentials. Areas such as problem-solving, teamwork and knowledge about hygiene and nutrition are directly linked to the social and economic success of the young and adult population.

3. Health and wealth, a special relationship

Considerable academic and policy attention has been focused on the correlation between health trends and economic performance patterns (WHO 2001a).

Studies performed by the Commission on Macroeconomics and Health (CMH) (established by the World Health Organization in January 2000) and the United Nations Population Fund (UNFPA), for example, demonstrate that healthier societies are more productive (WHO 2001a; UNFPA 2002). They also show that health improvements act as a catalyst for more robust economic performance and serve as core components of social development. Such evidence indicates that health improvements in fact spur economic growth.

(a) Healthier people, healthier economies

Improved health status generates positive trends in household income, wealth creation, labour productivity, labour-force participation and savings and investment rates, among other benefits. Interpretations, however, differ as to the possible direction of causality between improved health and economic growth. Some studies hold that improved health is the result of improved economic development, while others conclude an inverse causality. Both positions might be valid in the sense that the relationship between good health and economic status might be a virtuous cycle in nature. Improved health may bring about economic success, just as economic success brings about improvements in health (WHO 2001a).

Notwithstanding these debates, two points bear highlighting. First, a positive long-term relationship exists between improved health and economic performance. Second, the good health of a society is undeniably an end in itself.

Over the past century, advances in food production, investments in public health infrastructure and greater success in controlling diseases proved to be vital elements of successful quests to achieve improvements in health. The economic growth of Japan in the early twentieth century and the East Asian "economic miracle" of the 1950s and 1960s occurred in the context of wide-scale improvements in nutrition, public health and disease control (WHO 2001a, p. 22).

Evidence from Australia and countries in Europe indicates that health improvements over the last 100 to 125 years increased the pace of long-term growth by 30 to 40 per cent (Arora 2001). In the United

Kingdom of Great Britain and Northern Ireland, around one third of the economic growth over the last 200 years has been attributed to improvements in health and nutrition (Fogel 1993). A study on Latin America during the second half of the twentieth century also found a significant correlation between health and income status (Mayer 2001).

(b) Disease: a depressing effect on economic performance

Disease reduces not only the lifetime income of individuals but also the annual societal income and the prospects for economic growth. This is one of the findings by CMH (WHO 2001a). The burden of disease on low-income countries can be a profound barrier to economic growth and poverty reduction. Over time in the poorest countries, diseases can be responsible for substantial GNP losses.

The high prevalence of diseases such as malaria and HIV/AIDS is associated with persistent and large reductions in economic growth (WHO 2001a). High malaria prevalence, for example, is associated with a reduction in economic growth of 1 per cent or more per year (WHO 2001a, p. 24).

Communicable disease prevalence greatly increases the cost of migration, investment, commerce and trade within a country and with its neighbours. Studies suggest that even modest increases in international linkages across populations (e.g., due to tourism, migration or business travel) could substantially increase the rate of transmission of infectious diseases (WHO 2001a, p. 30). Many countries whose economies rely heavily on foreign direct investment or tourism – and these include many economies in the Asian and Pacific region – are especially vulnerable.

*(c) Interplay of health and demographic variables:
the economic impact*

Analyses of cross-country data over the past quarter-century show that the interplay between health and demographic variables can have an important effect on economic growth rates. By some accounts, health and demographic variables accounted for over half of the difference in growth rates between Africa and the rest of the world over the period 1965-1990 (Hamoudi and Sachs 1999, p. 11).

Box I.5. A tale of six countries

The critical link between sustained government expenditure on health and education and economic performance is best illustrated by comparing countries in South-East and East Asia with those in South Asia over the past few decades. In 1970, although income levels among these six selected countries were not greatly different, Malaysia, the Republic of Korea and Thailand spent much more per capita on education and health than did Bangladesh, India and Pakistan. Since then, that spending gap has widened.

Per capita expenditure on education and health in selected countries of the region

(US dollars)

Country	Education		Health	
	1970 or earlier year	2000 or later year	1970 or earlier year	2000 or later year
Bangladesh	1.20	6.80	0.50	3.20
India	1.60	13.80	0.40	2.40
Malaysia	16.40	226.40	5.50	61.20
Pakistan	0.40	14.20	0.10	4.30
Republic of Korea	9.10	371.40	0.70	17.80
Thailand	11.00	88.10	2.00	25.80

Sources: M. Aynul Hasan, "Role of human capital in economic development: some myths and realities", *Development Planning in a Market Economy*, Least Developed Countries Series, No. 6 (United Nations publication, Sales No. E.02.II.F.24, 2001), pp. 3-14. Calculations based on World Bank, *World Development Report 1982* (Washington, Oxford University Press, 1982) and *World Development Indicators 2001* (Washington, 2001), and Asian Development Bank, various issues, *Key Indicators of Developing Asian and Pacific Countries* (Oxford University Press); ESCAP 2002a. Sustainable Social Development in a Period of Globalization: Challenges, opportunities and policy options (ST/ESCAP/2202), p. 35.

In 1966, annual per capita GNP in the Republic of Korea and Thailand was under US\$ 150, slightly higher than in Bangladesh (then East Pakistan) and India (Hasan 2001). Per capita GNP in Malaysia was approximately US\$ 350. By 1999, annual per capita income exceeded US\$ 3,000 in Malaysia, reached nearly US\$ 9,000 in the Republic of Korea and was over US\$ 2,000 in Thailand. In contrast, it stood below US\$ 600 in Bangladesh, India and Pakistan. Along with their respective economic growth paths, different levels of human capital distinguished the group of high-performance economies from their South Asian counterparts (Hasan 2001). In 1960, literacy rates exceeded 50 per cent in Malaysia, the Republic of Korea and Thailand. Those rates have since increased to 90 per cent and higher in each of those countries. By contrast, literacy rates in Bangladesh, India and Pakistan were below 30 per cent in 1960 and had risen only to the 40 to 60 per cent range by the late 1990s. Furthermore, in the case of the South-East and East Asian countries, the emphasis has not only been on using resources more effectively, but also on improving the quality of education and reducing the gender gap in education, which is another factor related to better economic performance (Hasan and Rasheed 1999).

Such significant improvements in economic performance are, however, possible only when investments in human capital are made continuously. Moreover, it has been found that a change in public investment priority, from economic towards social infrastructure, depresses GDP in the short run but pays dividends in terms of a higher national income after a lag of about eight years (Pasha and others 1996).

Shorter life expectancies, for example, inhibit investment in education and other forms of human resources development. That stems from the perception that many people will not survive long enough to benefit from the investment.

By contrast, the gains in per capita income growth as a result of improved life expectancy are quite impressive. When comparing the level of well-being across societies, it is important to take into account life expectancy as well as annual income. In healthier societies, individuals who live much longer on average tend to have higher lifetime earnings (WHO 2001a, p. 25).

(d) Poor health and poverty

Communicable diseases, maternal mortality and undernutrition afflict the poor more than the rich. Among the many factors that increase poor people's susceptibility to disease are a lack of access to clean water and sanitation, adequate housing, nutrition and health care, as well as accurate information about good health-care practices.

The risk of tuberculosis infection, for instance, rises in crowded and poorly ventilated environments such as slums, tenements and prisons. The risk of malarial infections is higher in poorly constructed houses, which are less effective in barring the entry of the carrier mosquitoes (Hamoudi and Sachs 1999, p. 1).

Poor people are also less likely to seek medical treatment during the earlier (and more easily treated) stages of illness than people who are more economically secure. Once they do seek treatment, the expenses are likely to drive them deeper into poverty, as they take on more debt or sell productive assets to pay their bills (WHO 2001a, p. 23).

The effects of poor health on individual productivity are greatest in developing countries. Better-educated individuals tend to perform jobs that are more sedentary and safer. Healthy workers are physically and mentally more energetic, and consequently more productive and capable of earning higher wages. Poorer and less educated people are more likely to work in manual jobs that are physically demanding and stressful. The risk of serious workplace injuries is higher. They are also less likely to take days off work as a result of illnesses affecting themselves or their families. Illness and disability can significantly reduce worker incomes (WHO 2001a, pp. 34), imposing additional strain on households. An insidious cycle ensues.

Ill health today often begets ill health tomorrow, by increasing the likelihood of seemingly unrelated illnesses. For example, research suggests that maternal protein deficiency during pregnancy may result in lower-birth-weight babies and increase the offspring's long-term risk of cardiovascular disease (Hamoudi and Sachs 1999, pp. 7-8).

Childhood health and nutrition are important determinants of the extent and severity of chronic conditions later in life. Thus, the United Nations Standing Committee on Nutrition has warned that nutritionally handicapped infants and children can often suffer impaired brain development. Hunger and micronutrient deficiencies are estimated to decrease children's learning capacity by up to 10 per cent, with significant implications for their educational potential (ESCAP 2002a, p. 27).

Chronic hunger dulls the mind, thwarts productivity and engenders ill health, preventing people and communities from realizing their full potential. For poor families, hunger-related illness adds to household costs and increases the burden of care borne by family members.

Many other infectious illnesses, including malaria and tuberculosis, require complex natural cell-mediated immune responses. Poor overall health and nutrition reduce the effectiveness of these responses, increasing the likelihood that infection from these diseases will be more severe, resulting in long-term disability or death (WHO 2001a).

Poor people living with HIV/AIDS who have no access to drug therapy soon become susceptible to opportunistic infections and lose their ability to engage in remunerative work. They need a more nutritious diet, which their families may be unable to provide.

4. Lessons of high-achiever developing countries

In a UNICEF analysis of 10 global "high-achiever" developing countries and areas (including three from Asia and the Pacific), social indicators, including those on health and education, were considerably higher than what national development indicators had suggested (Mehrotra 2000). Over a span of 50 years, those countries and areas had made advances in health and education that had taken the industrialized world nearly 200 years to attain (Mehrotra 2000, p. 1). In all 10 cases, the incidence of killer diseases, such as diphtheria, tetanus and polio, had fallen dramatically, child mortality rates had plummeted and life expectancy had soared.

What lessons can be drawn from their achievements? The economic and social policy choices made by those high-achiever developing countries included the following (Mehrotra 2000, pp. 4ff):

- *Public policy action focusing on services for the majority:* Regardless of whether it was a centrally planned or a market economy, public policies were designed – and implemented – to ensure that the vast majority of people would enjoy equitable access to basic services.
- *Good and targeted spending on basic services:* “Good” spending rather than “big” spending characterized investments in basic services. The countries were not big spenders in social policy areas relative to their income. Where they scored high was in the targeting, efficiency and quality of the spending, as measured by the human development outcomes. They concentrated their spending on primary and basic secondary education, as well as on low-cost primary health-care interventions, particularly targeting women and the poor.
- *Steady and adequate levels of social expenditure in good times and bad:* Social investments were, for the most part, protected during times of economic crisis and structural adjustment. Attempts were made to achieve equity between spending patterns in various sectors. Importantly, strong levels of social spending were maintained – a vital lesson, since it is now clear that investments in human resources development must be continuous and may require up to eight years before bearing dividends in terms of national economic growth (Hasan 2001; ESCAP 2002a, p. 34). Such investments are necessary for a country to develop economically and socially and to utilize higher levels of technology, production and knowledge. Adequate allocation of resources to the education and health sectors is thus central to sustainable development.
- *Efficiency and equity in public spending:* There was an emphasis on efficient utilization of human and financial resources to avoid social spending from becoming a burden on the State treasury. Subsequent experience has confirmed the need for efficient allocation and technical proficiency in using resources, as well as the importance of addressing non-financial constraints in the delivery of health services.

- *Gender-sensitive sequencing of social investment as well as specific attention to vulnerable social groups:* Another key lesson is the importance of women's health, rights and freedom, including the right to be educated and the freedom to engage in gainful work outside the home, earn an independent income and have ownership of assets. In addition, social investment must benefit certain social groups who live in remote or resource-poor areas or who are vulnerable on account of age, health, living environment or means of livelihood. They may be denied access to assets because they belong to an ethnic minority or a community considered socially inferior, or simply because they are female or have a disability.
- *Sequencing of social investment:* In sequential social investment, the investment in basic education by the State preceded or was simultaneous with the drop in infant mortality or public health expansion. It did not occur afterwards. Investments in these sectors had a synergistic impact on health, education, nutrition status and access to water and sanitation; in other words, the sum of their impact exceeded the effects of the individual investments.

B. Challenges in the Asian and Pacific region

While the Asian and Pacific region has indeed taken great strides in social and economic development, huge challenges remain in consolidating and extending the gains. The progress of the past half-century has not occurred uniformly across the region. In addition, the recent Asian financial crisis slowed the pace of social gains in many countries and set that progress back in others.

1. Millennium development goals

Recognizing this worldwide situation of poverty and vulnerability, the United Nations Millennium Summit committed itself to a set of 8 goals and 18 time-bound and measurable targets to reduce extreme income poverty as well as some major aspects of human poverty. Available data suggest that, based on current trends, the prospects for meeting the millennium development goals by 2015 in Asia and the Pacific are mixed (ESCAP 2002f). The following are some indicators:

- The eradication of extreme poverty is the overarching goal. The target is to halve the proportion of people with a daily income of less than US\$ 1 (in terms of purchasing power parity) between 1990 and 2015. Based on past trends, this target could be achieved for the ESCAP region overall if progress is sustained in East Asia (mainly China) and South-East Asia.
- Universal primary education for boys and girls appears to be within reach, based on current evidence.
- Current evidence suggests that progress towards erasing gender disparities in primary and secondary education (preferably by 2005 and, at all levels of education, by 2015) will be generally slow.

2. Challenges on the health front

Major health advances have occurred over the past few decades in much of Asia and the Pacific. But not all health challenges have been confronted. Many health problems remain widespread and new threats are looming. Many of the developing countries in the region carry a substantial burden of communicable diseases that disproportionately afflict the poor. These countries are also confronted with the challenges of burgeoning non-communicable diseases and health-threatening environments that boost the prevalence of both communicable and non-communicable diseases.

As the region moves into the new millennium, the most common causes of death have begun to resemble the patterns found in industrialized societies. Diseases of the circulatory system and various forms of cancer have become dominant.

But one of the greatest threats emerging in the region is that of HIV/AIDS. If allowed to spread unabated, HIV/AIDS could well unravel much of the economic and social progress made in the last three decades.

(a) Unfinished tasks

(i) Hunger

Hunger is both a cause and an outcome of poverty. The millennium development goals call for reducing the number of hungry people globally by 20 million annually, in order to halve the incidence of hunger by 2015. Fully 14 million of those 20 million

people would be living in the Asian and Pacific region, where there are more chronically hungry people than in any other developing region (FAO 2001). Currently, an estimated 515 million Asians are chronically undernourished, accounting for about two thirds of the world's total.

(ii) Childhood malnutrition

Malnutrition remains a major cause of mortality in children under five years of age, in part because it renders them more susceptible to infectious and parasitic diseases. Excluding China and India, it is estimated that child malnutrition is responsible for more than 12 per cent of all deaths among children under five in Asia and the Pacific (Shetti 2001, p. 10). Overall, Asian children account for over two thirds of the 174 million undernourished children under the age of five in the developing world.

The extent of child malnutrition is worst in South Asia, where more than half the young children are estimated to suffer from protein-energy malnutrition. This is more than twice the level in East Asia, at least thrice that of the Middle East and about five times that of the high-income countries of Europe and North America. Equally alarming is the high incidence of low-birth-weight babies in South Asia, the prevalence of which points to the poor nutritional status of the mothers (ESCAP 2002a, p. 27).

(b) Emerging challenges

(i) Environmental dimension

Countries with narrowly focused economic growth and development policies often neglect environmental dimensions that have a crucial bearing on people's health. Rapid economic growth has often entailed large-scale environmental degradation, such as the depletion of natural resources, atmospheric pollution, reduction of biodiversity, drying-up of aquifers, pollution of aquatic and marine ecosystems and the increasing production of wastes (ESCAP 2003b). Among the many serious and long-lasting consequences is the effect this can have on health:

- Air and water pollution compromises efforts to prevent and control communicable diseases;
- Poor agriculture and forestry practices threaten food safety and self-sufficiency, as well as nutrition;
- Degradation of the environment lowers the quality of life in both urban and rural areas.

Ecological damage affects the poor severely because they are dependent on environmental resources, especially if they live in the rural areas. Deforestation, industrial and transport pollution, water pollution, food chain contamination and land erosion harm not just the livelihoods but also the physical health of the poor. Across the region, the urban poor generally live or work near polluting factories and roads, dump sites and slums in the midst of urban contamination. The demand for water to meet domestic, industrial and agricultural needs continues to increase. Meanwhile, the proportions of populations that have access to potable water vary considerably across the region.

(ii) Population ageing

As average life expectancy increases in the region, population ageing is expected to reach unprecedented levels in the next few decades. The rate at which populations are ageing is a serious concern. As larger proportions of the population reach 60 or more years of age, additional care responsibilities fall on younger family members and on society in general, not least the public and private sectors, which need to meet health, welfare, pension and other needs. Unless planned for, population ageing could have a negative effect on the availability and allocation of resources at all levels of society.

(iii) Avoidable deaths

Avoidable deaths are measured by comparing, on an age-adjusted basis, the death rates in developing countries with those of non-smokers in industrialized countries. Disaggregated by age group, avoidable deaths account for more than 8 out of 10 deaths among children below 5 years of age in low- and middle-income countries. Six out of every 10 male deaths among those aged between 5 and 29 years are avoidable, as are 8 out of every 10 female deaths in the same age group. The higher figure for females is largely due to the increased risks associated with pregnancy and childbirth. More than 5 out of every 10 deaths among women aged 30 to 69 years are preventable, as are 4 out of every 10 deaths of men in that age group (WHO 2001a, p. 42).

Infectious diseases are the single-biggest cause of death and disability in the world. Developing countries carry a disproportionately large burden of these diseases, which include HIV/AIDS, malaria, tuberculosis and respiratory illnesses.

According to WHO, the health prospects of the poorest people could improve rapidly if attention were focused on the following few diseases and conditions (WHO 2001a, p. 42):

- HIV/AIDS;
- Malaria;
- Tuberculosis;
- Maternal and perinatal conditions;
- Widespread causes of child mortality, including measles, tetanus, diphtheria, acute respiratory infection and diarrhoeal disease;
- Malnutrition that exacerbates those infections;
- Other vaccine-preventable illnesses;
- Tobacco-related diseases.

Of all the preventable diseases, HIV/AIDS poses the most significant health concern for the region's poorest people. Within a span of only 20 years, HIV/AIDS has reversed the health gains of several countries, most notably in sub-Saharan Africa, the region which is currently the hardest hit by the pandemic. HIV/AIDS threatens individuals, communities and societies across the entire world. In the Asian and Pacific region, that threat now looms disturbingly large, as chapter II shows.

(iv) Unforeseen risks

a. "Tigers" take a tumble

The Asian financial crisis that struck parts of South-East and East Asia in mid-1997 revealed serious flaws in some of the growth strategies used by the "tiger" economies. It is generally agreed that rapid financial liberalization, weak macro-economic management and other policy and institutional failures were common factors underlying the problems of these four Asian economies (Sussangkarn and others 1999).

Starting off in Thailand with the floating of the baht and a subsequent run on the Thai currency by foreign investors, the crisis rapidly spread to Indonesia and the Republic of Korea. The Philippines and Malaysia were also affected, but to a much lesser extent. What caught Governments and international financial institutions by surprise was the speed at which the crisis spread and the extent to which these economies, once considered unassailable, were affected. Currencies across the region plunged in value, businesses collapsed and stock markets slumped as domestic and foreign investors stampeded out of the South-East and East Asian economies.

While Thailand's currency at one point lost 55 per cent of its pre-crisis value, Indonesia's shrank by as much as 85 per cent. In Indonesia, the Republic of Korea and Thailand, the three worst-affected countries, GDP per capita in 1998 fell by 13.6, 5.8 and 9.9 per cent respectively (ESCAP 2002b).

The crisis hit the social sector hard, and along three main routes:

- Job losses, unemployment and underemployment;
- Currency devaluation, falling real value of wages and increases in the prices of essential imported commodities;
- Government budget cuts.

b. Unemployment

In the Republic of Korea, the average unemployment rate between 1989 and 1997 had stood at a low 2.2 per cent of the labour force. After the crisis, the rate more than tripled to 6.8 per cent in 1998, before rising further to 8.4 per cent in the first quarter of 1999. Job losses were heaviest in the manufacturing and construction sectors. Workers at the lowest echelons were the most severely affected, with manual production and clerical workers hardest hit (ESCAP 2002b).

Thailand's experience was similar to that of the Republic of Korea. An unemployment rate of just 2 per cent in 1996 rose to 3.7 per cent the next year before leaping to 5.2 per cent in 1998. An estimated 1.2 million workers lost their jobs as a result of the crisis, with women accounting for more than half the lay-offs. Underemployment among women also increased, reaching 13.7 per cent of the labour force in 1998, while their real wages shrank, particularly in urban areas. Reverse migration occurred from Bangkok and adjacent areas back to the rural areas, increasing social and economic pressures in the rural areas.

c. Declines in income

In Indonesia, in spite of a massive 13.6 per cent contraction in GDP in 1998, triggered by the crisis, the overall unemployment rate rose by only 0.7 per cent. But wages were slashed by 34 per cent in real terms in the formal urban sector and 40 per cent in agriculture. By some estimates, Indonesia's rural poor doubled in number in 1998, along with a sharp increase in extreme poverty (Dhanani and Islam 2000).

In Thailand, the proportion of the population with incomes classified below the national poverty line increased from 11.4 per cent in 1996 to 13 per cent in 1998. In the north-east of the country, the proportion of people living in poverty rose from an estimated 19 to 23 per cent in the same period (Ministry of Public Health, Thailand 1999).

The Asian crisis also caused a serious deterioration of household welfare in the Republic of Korea. The number of people defined as poor in urban areas tripled from 7.5 per cent in the first quarter of 1997 to 23 per cent in the third quarter of 1998 (Kang and Sawada 2002). According to some estimates, between December 1997 and March 1999, 64 per cent of the country's 6 million-strong middle class slid into lower income brackets (ESCAP 2002a).

In some countries, rapid inflation also ensued, eroding purchasing power and lowering standards of living. In Indonesia, the annual rate of inflation, calculated from the consumer price index, rose from an average of 8.8 per cent during the period 1990-1996 to 57.6 per cent in 1998, a sevenfold increase (ESCAP 2002a).

d. Government budget cuts

The health expenditures of the Government of Thailand had been rising steadily until 1997, when the crisis forced the Government to trim the 1998 national budget by 17 per cent. The Ministry of Public Health cut its budget for HIV/AIDS-related work by 24.7 per cent in 1998, compared with a 5.5 per cent cut in the rest of the health budget. There was also a 6 per cent cut in education spending for 1998 (Mukhopadhyaya 2002).

In Indonesia, the nominal health budget for the 1998/99 fiscal year was cut by 4 per cent from its 1997 level. In real terms, the cut was much higher owing to rising inflation (ESCAP 1999). A steep drop in the enrolment of students in secondary school followed, most notably among low-income groups and students living in urban areas (UNESCO 2000a).

e. Responses

Prior to the 1997-1998 crisis, countries in South-East and East Asia had benefited from a virtuous circle in which economic growth and social development reinforced each other. However, social safety nets that could protect people during a crisis situation had not featured prominently in their policy agenda (ESCAP 1999).

As they reeled from the economic turmoil, several countries raced to design policies and introduce programmes aimed at slowing the deterioration of social conditions. Moving with haste, Governments were also faced with financial, human and institutional resource constraints.

Nevertheless, responses were mounted, sometimes with the assistance of international organizations and donors. In Indonesia, for example, a major social safety net programme prioritized the boosting of food security, employment creation, development of small and medium-sized enterprises and basic services provision (particularly health and education).

In the Republic of Korea, the Government responded to rising unemployment with a strong benefits package, which included an expanded unemployment insurance system, a subsidized loan programme for the unemployed and venture businesses, active labour-market policies and public works programmes.

The Thai Government launched a US\$ 460 million "social investment project" with funding support from the World Bank and other agencies. The project was divided into two parts. The first part emphasized employment creation and improved access to social services such as health care. The second part involved investing in urban infrastructure and simultaneously initiating a host of grass-roots development projects with the help of community organizations, networks and local institutions. Thailand's "One Million Baht per Village" project is also noteworthy. It is a revolving loan programme directed at the country's 70,000 villages and is specifically targeted at projects to jump-start the rural economy.

Box I.6. Women and the crisis

Women have played a vital role in the economic performance of Asia and the Pacific. Their labour drove much of the economic boom prior to the 1997-1998 crisis (ESCAP 2002a). Their most telling economic contributions came in the form of low-paid labour in export-related activities and through domestic labour. Their participation in the service industry and as migrant workers generated remittances that sustained whole rural communities.

Just as the Asian economic boom had been based largely on the low-paid labour of women workers, much of the hardship created by the financial crisis was borne by women. Women generally assumed responsibility for "making ends meet" as household real incomes fell. Unemployment tended to intensify their workloads by compelling them to participate in both the formal and informal labour markets on reduced terms and for lower wages. This made women workers the category of workers most severely affected in the Asian crisis.

Source: ESCAP, *Sustainable social development in a period of globalization: Challenges, opportunities and policy options* (ST/ESCAP/2202).

The economic situation in all three of the most affected countries (Indonesia, Republic of Korea and Thailand) has stabilized. The lesson emerging from the Asian crisis, however, is that there is a longer-term need to provide comprehensive social safety nets for citizens, along with the immediate challenge of gearing up institutions to respond rapidly to social and economic emergencies.

C. Conclusion

Many economies in the Asian and Pacific region have made remarkable strides in economic development over the past three to four decades. Measured against critical social indicators, from life expectancy and infant mortality to adult literacy, their progress has been equally remarkable in social development.

The spectacular performance of these economies has been possible because their developmental efforts were built on the foundation of a strong human resources base. This establishes the fact that causal links between good health, education and economic growth are direct and mutually reinforcing. Significantly, high economic growth rates are not a prerequisite for strong social development and for undoing the worst manifestations of poverty. The high-growth economies in the region achieved social progress very early in their development process, when their national incomes were still low.

However, all the great strides in improving health, education and economic performance in the Asian and Pacific region are vulnerable to reversal. The economic crisis in 1997 was just one example of how a debilitating shock could reshape the development landscape of an entire region. There are now new factors that threaten to imperil many of the remarkable social accomplishments of the past few decades. One such major factor is the surge in the HIV/AIDS epidemic in Asia and the Pacific.

In countries where a virtuous dynamic of good health, combined with sound economic performance, did not operate, poverty, ill health, illiteracy and malnutrition persisted. There are several such economies in the Asian and Pacific region which did not perform well. In such countries, the poor endure a disproportionately high proportion of the burden of communicable diseases and malnutrition. The spectre of HIV/AIDS looms ominously on their horizon too.

The threat of HIV/AIDS to the region is already evident. The knowledge needed to prevent its spread, namely, to address it as a development challenge, is at hand. There is no reason for inaction.

CHAPTER II

HIV/AIDS: WHERE IS THE PANDEMIC HEADED IN THE ASIAN AND PACIFIC REGION?

"The ultimate measure of a man is not where he stands in moments of comfort and conveniences, but where he stands at times of challenge and controversy."

Dr. Martin Luther King Jr.

A. HIV/AIDS – into the third decade¹

The global scale of the HIV/AIDS epidemic exceeds even the most alarming scenarios conceived a decade ago. Numerous countries are experiencing generalized HIV/AIDS epidemics. Many more are teetering on the edge. Globally, at the end of 2002, there were 42 million people living with HIV/AIDS (PLWHAs), 19 million of them women and more than 3 million of them children under 15 years of age. AIDS claimed more than 3 million lives in 2002, including an estimated 610,000 children. Currently, about 5 million people are acquiring HIV each year, 800,000 of them children.

Prevalence rates have risen sharply in virtually every region of the world in the past decade. The only exceptions have been North America and Western and Central Europe, as well as parts of South America. However, there are worrying signs of rising infection rates among women and minority populations in several developed countries, while high-risk behaviour appears to be increasing in some groups.

In developing countries, the outlook is considerably gloomier. Projections for 126 low- and middle-income countries showed that an additional 45 million people would become infected between 2002 and 2010 in the absence of concerted and robust prevention efforts.

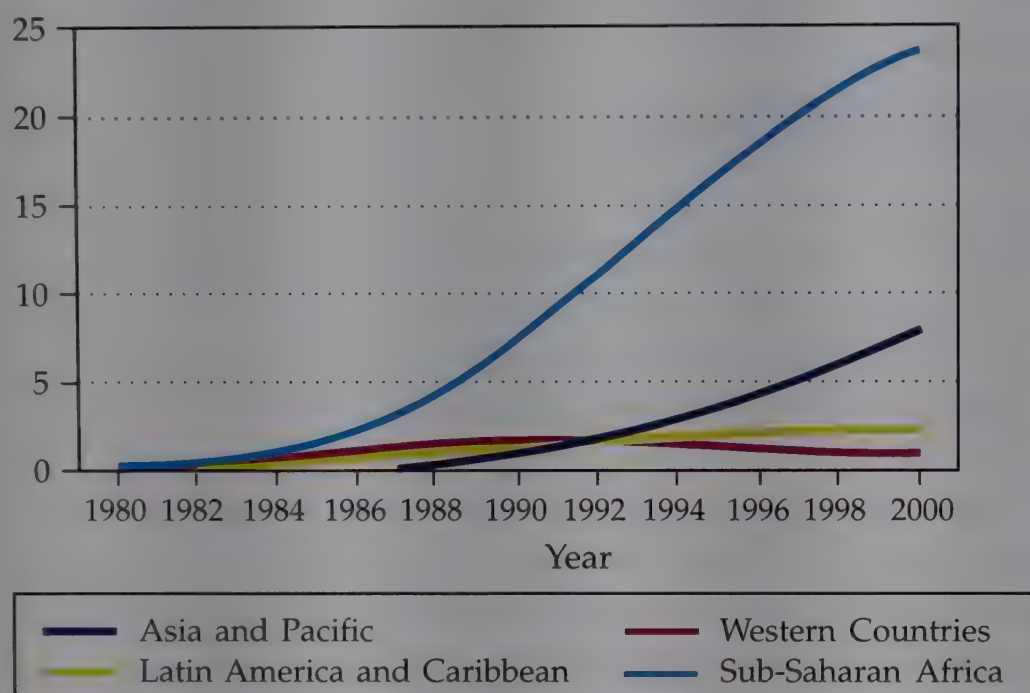
¹ UNAIDS/WHO (2002). All the data in this section are taken from this reference, unless otherwise stated.

B. HIV/AIDS in the Asian and Pacific region

1. An alarming outlook

Asia and the Pacific now accounts for one in every five new HIV infections worldwide. In all, over 8 million people were living with the virus in the region at the end of 2002, of whom 2.6 million were young people aged 15 to 24. More than half a million people died of AIDS in the region in 2002. Fully 1 million acquired HIV in the same year.

Figure II.1. Percentage of HIV seroprevalence in the adult population by region of the world



Source: HIV/AIDS and Development in Asia and the Pacific: A Lengthening Shadow, (Melbourne, The Australian Government's Overseas Aid Program and World Health Organization Regional Offices for South East Asia and the Western Pacific Region, 2001, p. 154).

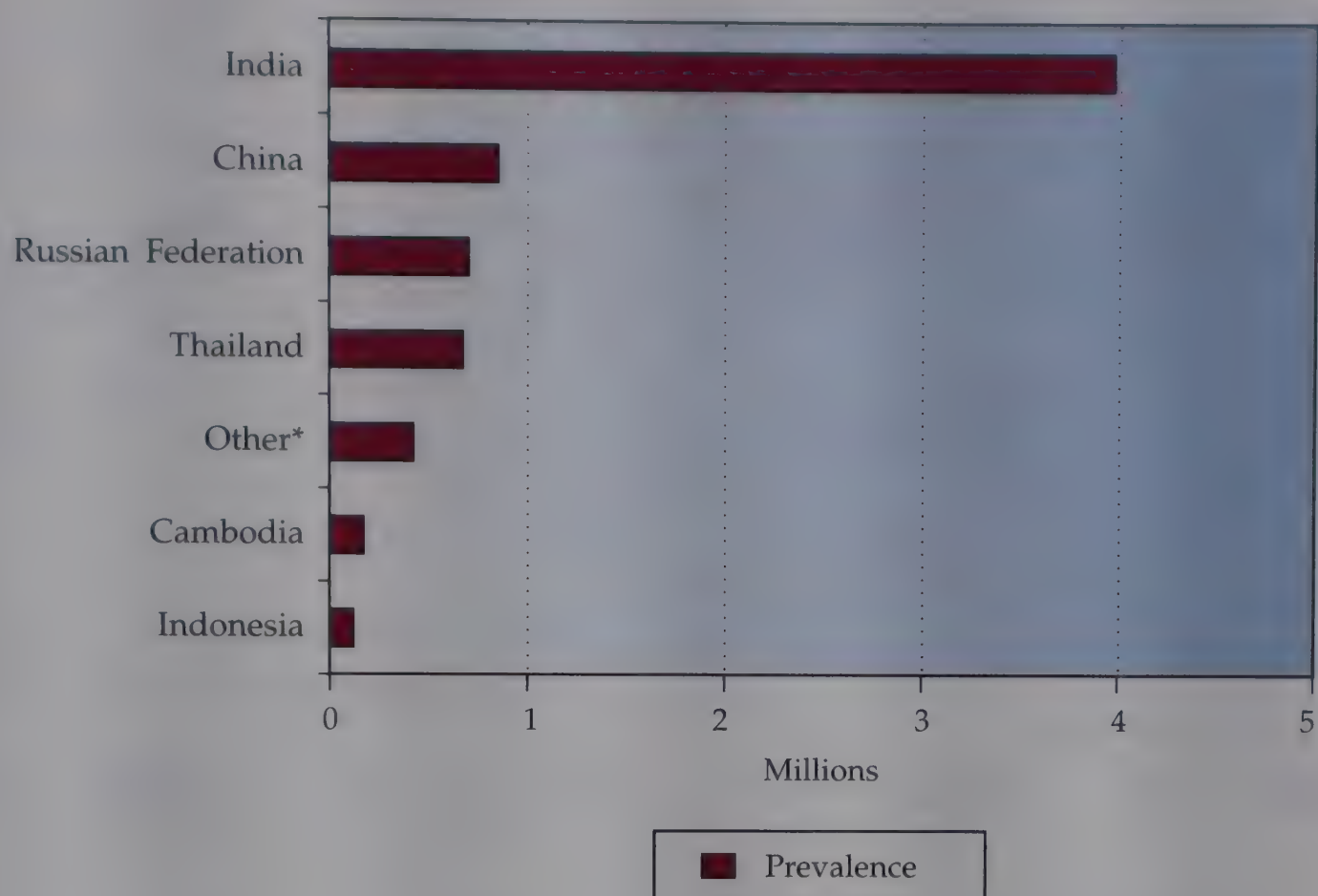
As figure II.1 shows, the epidemic in Asia and the Pacific has not yet reached the dimensions witnessed in some African countries. Based on current trends, however, the region could replace sub-Saharan Africa as the centre of the global HIV/AIDS epidemic over the next decade in terms of the absolute number of people affected.²

In two countries, Cambodia and Thailand, national adult HIV prevalence rates are at least 1 per cent. However, the low national prevalence rates in the rest of the region disguise the severity of the threat. In just two countries alone (China and India), an

estimated 5 million people were already living with HIV/AIDS at the end of 2002. Official estimates predict a 10-fold increase in PLWHAs in China by 2010, a reminder that even a minute rise in national HIV prevalence in populous countries translates into many millions more acquiring the virus. In a region where the populations

² In 2002, Sub-Saharan Africa had 3.5 million new HIV infections bringing its total number of PLWHA to 29.4 million.

Figure II.2. Estimated HIV/AIDS prevalence for selected countries in the ESCAP region, 2001



Source: UNAIDS, *Report on the global HIV/AIDS epidemic* (Geneva, UNAIDS, 2002).

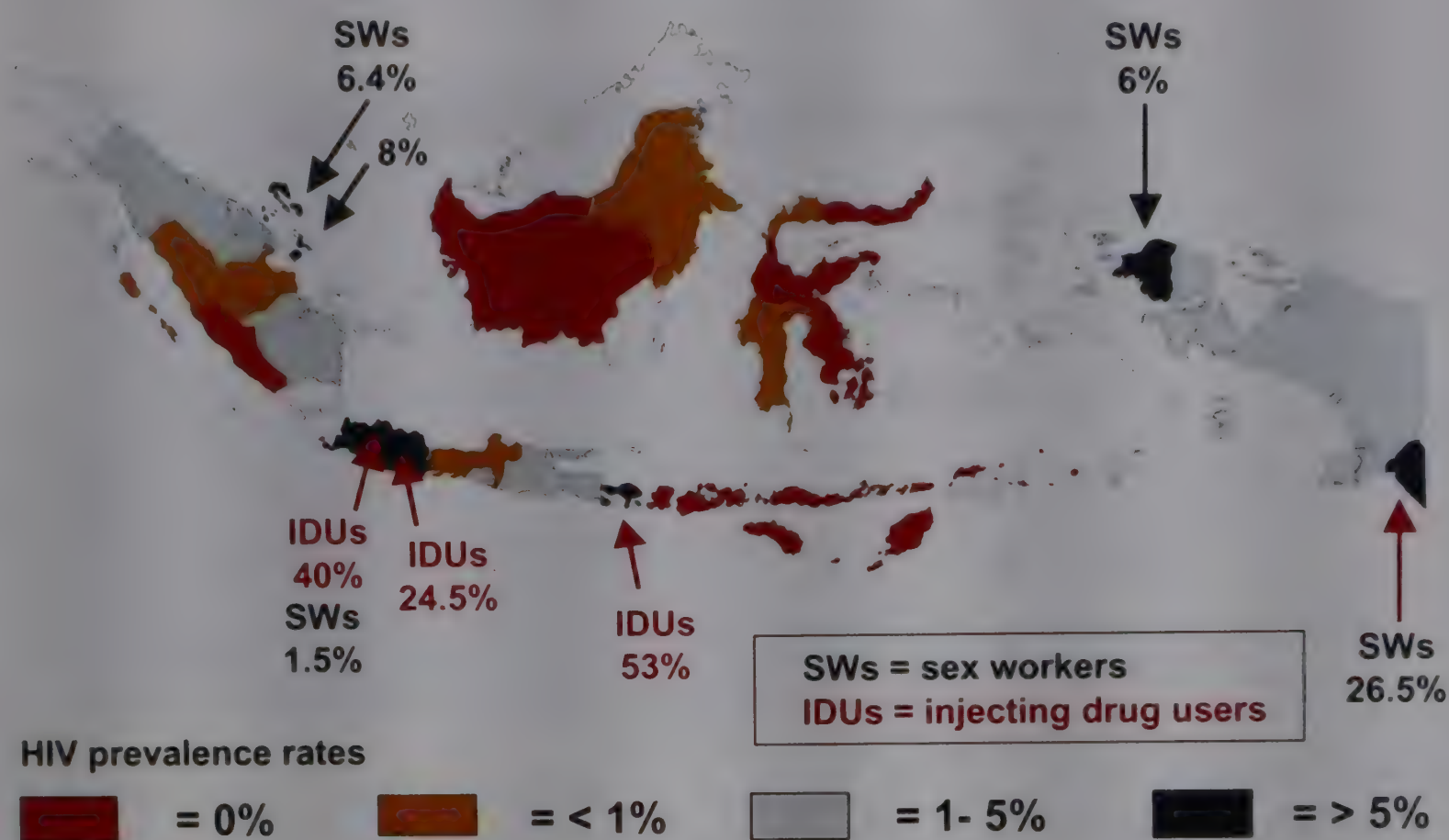
* All other ESCAP member countries and territories in the Asian and Pacific region.

of states and provinces of some countries outnumber the entire national populations of others, local outbreaks can represent mammoth challenges (MAP 2001, p. 1).

In China, the number of new HIV infections reported rose about 17 per cent in the first 6 months of 2000. In 6 states in India, HIV sentinel surveillance surveys indicate infection rates of between 1 and 3 per cent among antenatal clinic attendees. This prevalence in the 6 states in India translates into absolute numbers of between 2 and 3 million people (NACO 2001). The pandemic is also growing at an alarming pace in the Central Asian republics and in the Russian Federation.

In Indonesia, drug injection was practically unknown 10 years ago. Currently, this problem is a growing and alarming phenomenon in urban areas. National estimates indicate that some 43,000 injecting drug users (IDUs) are already infected with HIV.

Figure II.3. Indonesia: injecting drug use and unsafe sex



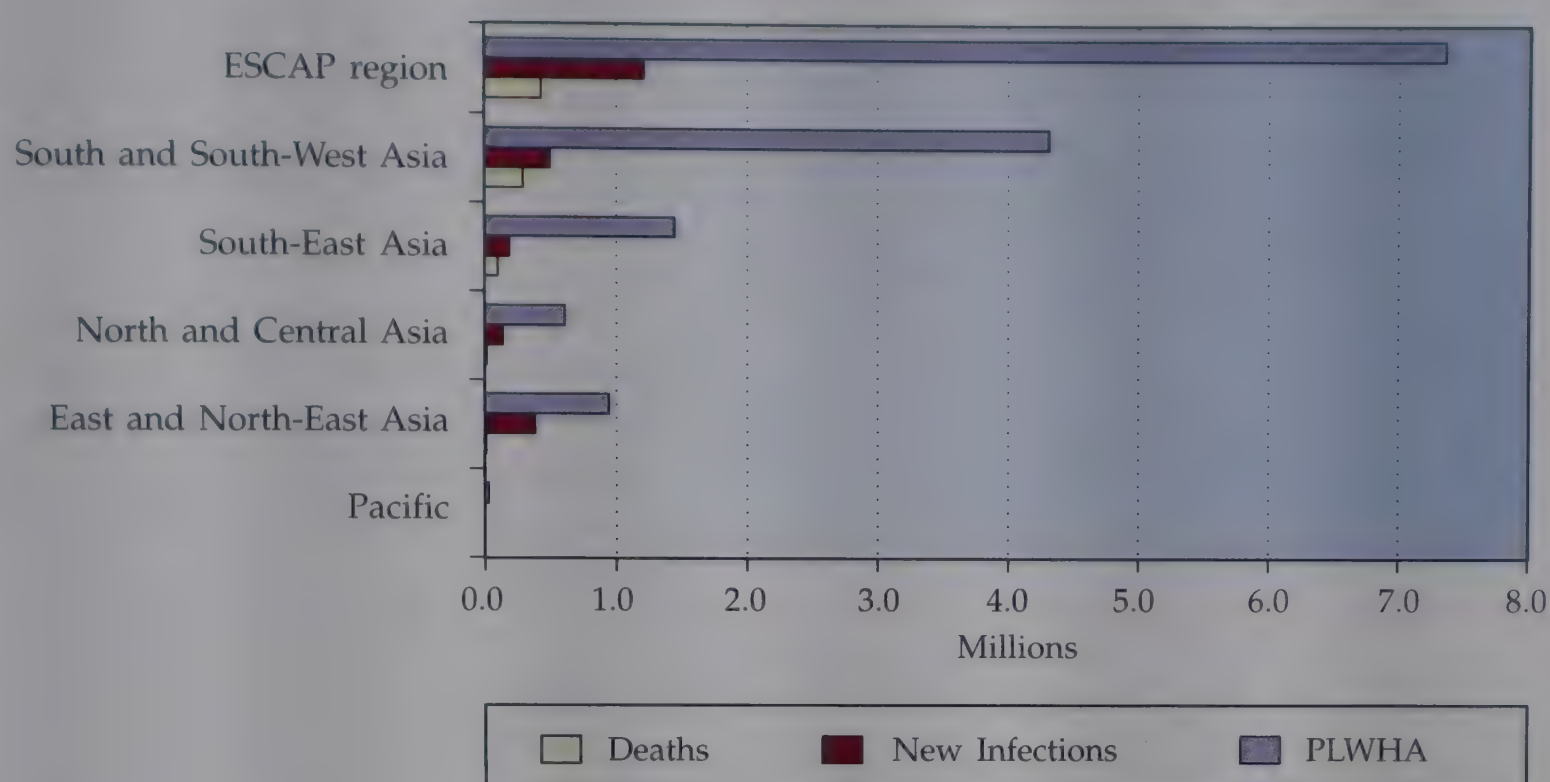
Source: Indonesian National AIDS Commission (2001) HIV/AIDS and other sexually transmitted infections in Indonesia: challenges and opportunities for action (taken from UNAIDS, *Report on the Global AIDS Epidemic*, (Geneva 2002, p. 86).

With needle-sharing being the norm, HIV is likely to spread much more widely throughout this population in the next few years. If current high-risk injecting behaviour continues, it is estimated that the number of IDUs living with HIV could almost double in 2003, accounting for more than 80 per cent of new HIV infections nationwide.

Figure II.3 shows the high prevalence among sex workers in some sites in Indonesia and the major outbreak among injectors in the past few years. Noteworthy is the 26.5 per cent prevalence rate among sex workers in some border areas.

Heterosexual intercourse is the main mode of transmission in the region. Injecting drug use among young people remains the predominant mode of HIV transmission in the Central Asian republics, the Russian Federation and some other countries of the region. Transmission modes are discussed further in chapter III.

Figure II.4. HIV/AIDS prevalence, new infections and deaths in the ESCAP subregions, 2001



Source: UNAIDS, *Report on the global HIV/AIDS epidemic* (Geneva, UNAIDS, 2002).

2. A diverse and growing epidemic

National HIV/AIDS trends in the ESCAP region can be divided into three groups. The first is composed of countries in which HIV/AIDS prevalence rates already exceed 1 per cent. It includes Cambodia (whose national prevalence rate is over 2 per cent), Thailand, parts of India, parts of Myanmar and parts of Papua New Guinea (UNAIDS 2002a, pp. 189-201).

The second group includes countries where the epidemic is still in a transitional stage, but where recent evidence indicates rapidly growing spread of HIV in specific populations and geographic areas. These include Armenia, China, Indonesia, Kazakhstan, Malaysia, Nepal, the Russian Federation, Uzbekistan and Viet Nam.

The third group includes countries and territories where the epidemic has not yet spread widely: Bangladesh; Hong Kong, China; Islamic Republic of Iran; Lao People's Democratic Republic; Mongolia; Pakistan; the Philippines; Republic of Korea; Sri Lanka; Turkey and several small Pacific island countries and territories.

In the case of the Pacific, limited information on the spread of HIV/AIDS is available. Nevertheless, in many of the Pacific countries and territories, conditions favour the rapid spread of HIV (UNAIDS 2002f) (see also box II.1 on Papua New Guinea).

India (which has States that fit into all 3 groups) and China harbour serious localized epidemics whose prevalence rates are many times higher than the national rates. There is no inherent guarantee that such epidemics will stay local and confined. Only intervention can alter that predictable course.

In addition, low and apparently steady HIV infection rates can suddenly soar. Indonesia (which fits into the second group) has seen a recent, rapid rise in infection rates, following a decade of consistently low rates. In Nepal, rates have also increased. During the early 1990s, the HIV prevalence rate among IDUs in the Kathmandu Valley stood at about 2 per cent; it now exceeds 50 per cent (World Bank 2002). In the same area, HIV prevalence among female sex workers has increased from less than 2 per cent in 1990 to a current rate of 20 per cent. In Ho Chi Minh City, Viet Nam, HIV infection among sex workers increased from virtually nil in 1996 to over 20 per cent in 2000 (UNAIDS 2001b).

Similar trends are evident elsewhere in the ESCAP region. In the Russian Federation, the total number of reported HIV infections climbed to over 200,000 by mid-2002, an exponential increase of 1,800 per cent over the 10,993 infections reported less than 4 years earlier. HIV/AIDS epidemics among IDUs have been detected in over 30 cities and 86 of 89 regions of that country. Substantial spread of HIV is now also evident in Azerbaijan, Georgia, Kyrgyzstan, Tajikistan and Uzbekistan. In the first 6 months of 2002, Uzbekistan saw almost as many new HIV infections as had been recorded in the entire previous decade.

3. Driving the epidemic: uneven development and poverty

The AIDS pandemic has developed distinctly in different areas of the ESCAP region. Nevertheless, several broad development dynamics are at play in the spread of HIV in Asia and the Pacific (Compendium of Reports 2001). They include poverty, gender inequality, population mobility, lack of access to information and essential services, especially among youth and other vulnerable groups, including sex workers, IDUs and migrant workers.

Box II.1. Papua New Guinea

Papua New Guinea has reported the highest HIV infection rate in the Pacific. Over the past 7 years, the country's HIV infection rate has increased annually by 60 per cent and there is no clear indication that the spread of HIV/AIDS is slowing. At present, the number of people living with the virus ranges between 15,000 and 20,000. HIV/AIDS is already the leading cause of admission and mortality at the Port Moresby General Hospital medical ward.

Data from antenatal clinics reveal that the prevalence rate is around 1 per cent in Port Moresby. Limited surveillance systems outside the capital make it difficult to gauge the spread of the virus. The prevalence rate for sex workers is over 10 times that of the general population. According to one study, in Port Moresby and Lae, 17 per cent and 3 per cent of sex workers, respectively, were HIV-positive. Only 15 per cent of the sex workers regularly used a condom and 34 per cent had reported not using one in the previous week.

Fortuitously, four factors have restricted the epidemic thus far:

1. The small-scale aggregation of urban areas;
2. A highway system that does not cover the entire country;
3. The limited size of the sex industry;
4. Low levels of chancroid acting as cofactors.

However, the signs are ominous that the epidemic may spread rapidly. Heterosexual sex is the main form of transmission, placing the whole society at risk, and not just certain groups, such as IDUs or MSMs. The other significant factor contributing to the spread of the virus is the widespread non-use of condoms in premarital and extramarital sexual relations.

Other contributing factors include "binge drinking" to the point of drunkenness, which removes constraints on behaviour and often leads to a need for sexual gratification. Other conditions include the mistaken belief held by individuals that the virus is predetermined and unlikely to affect them. Sex for favours is a common practice, but the sex industry has grown only with paid wages and migration to urban areas, such as Port Moresby and along the Highlands Highway. Migration between urban and rural areas enables the virus to spread to some of the country's more remote areas. Women have a low status in society, and domestic violence and alcohol abuse place them at particular risk of contracting HIV and other sexually transmitted infections.

Papua New Guinea was among the first countries in the world to acknowledge HIV/AIDS when in 1988 it approved the "National Medium-Term Programme for the Prevention and Control of Aids in Papua New Guinea, 1989-1995". Despite that early start, much work still remains to be done to halt the spread of the virus.

Source: Centre for International Economics (CIE), "Potential economic impacts of an HIV/AIDS epidemic in Papua New Guinea" (http://www.aisaid.gov.au/publications/pdf/hivaids_png.pdf, 2002).'

In several parts of the world, there appears to be a significant correlation between HIV prevalence rates, on the one hand, and poverty levels and income inequalities, on the other. While the exact nature of this relationship is complex and differs from place to place, there are some telling indications. Developing countries, home to 80 per cent of the world's population, have 95 per cent of HIV-infected persons. In countries where the disease has emerged, it appears that the poorer the country, the higher the HIV prevalence, and the greater the income inequality in the country, the more serious the epidemic. Additionally, low rankings on the United Nations Development Programme (UNDP) Human Poverty Index are also linked to HIV prevalence rates (Bloom and others 2001, p. 2).

Household data from Cambodia and Viet Nam, for example, indicate strong correlations between levels of wealth, education and vulnerability to HIV/AIDS (Bloom and others 2001, p. 3). In Cambodia, the country with the most advanced epidemic in the ESCAP region, the poorest segments of society have less access to knowledge of how HIV is transmitted and the means of preventing infection. They are also more likely to have sex at a younger age, are less likely to use condoms and, in the case of young women, more likely to turn to sex work as a means of supporting themselves and their families. Studies in the Greater Mekong Subregion countries also confirmed that poverty is a main factor forcing women into the sex industry, where they encounter considerably higher risks of HIV infection.

Development interventions can also spur HIV spread in sometimes-unexpected respects (Bloom and others 2001, p. 4). The expansion of transport systems, infrastructure development, urbanization, increases in disposable income, the growing importance of cash in agriculture and greater mobility, along with widening inequalities, which often accompany the early stages of rapid development, can also facilitate the growth of the epidemic. Migration in search of income and employment in new economic growth zones can increase the risk of HIV infection. Moreover, the epidemic tends to flourish among people and communities that are deprived of the elementary benefits of successful development, that is, basic services such as education and health care, secure employment, shelter and social safety nets essential for sustaining livelihoods.

A vicious circle is established. Choices and opportunities – hallmarks of successful human development – shrink as the epidemic gains a foothold in an environment of inequality and exclusion.

These negative developments and HIV/AIDS reinforce each other, with potentially catastrophic consequences, as some African countries are discovering (UNAIDS 2002c).

4. Driving the epidemic: cultural taboos

In many countries, cultural factors inhibit open discussion of issues related to sex (UNAIDS 2002a). Thus it is difficult to address issues of sex and sexuality: unsafe sex, casual sex, multiple sex partnership, homosexuality, bisexuality, use of sex worker services and paedophilia.

Sex between men, for example, features significantly in the region's HIV/AIDS epidemic. Yet in many places it is cloaked in secrecy and denial. Men who have sex with men (MSMs) face stigmatization, discrimination and harassment.

In a world of AIDS, the sum effect of such taboos is to block effective prevention efforts among marginalized groups, such as MSMs, leaving them at the mercy of the epidemic and abetting the eventual spread of HIV into the wider population.

Similarly, injecting drug use is a taboo subject virtually everywhere. This issue is discussed in chapter III.

5. Driving the epidemic: unfounded assumptions

There are several assumptions about HIV/AIDS that serve mainly to undermine an early, effective response to the epidemic. Many of them are plainly refuted by empirical evidence. Others appear unconvincing under scrutiny. Prominent among them are the five notions discussed below.

Assumption 1: The epidemic has a natural limit in Asia and the Pacific and could never reach the scale being witnessed in some African countries.

The continued global attention on Africa, as the region most affected by HIV/AIDS has perhaps encouraged the false notion that the Asian and Pacific region is somehow protected from the epidemic. This notion is misplaced for several reasons.³

³ Main source of information on counter-arguments to assumptions: Tim Brown, "Dynamics of Asian HIV Epidemics", paper presented at the Sixth International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 6 October 2001.

The size of the population base determines the potential of the epidemic in the region. In view of the region's large population base, even a low prevalence rate would translate into huge numbers. The number of new infections in Asia and the Pacific is estimated to be 18.5 million in 2010, as compared with an estimated number of 21 million new infections in sub-Saharan Africa in the same year (Stover and others 2002).

With regard to the notion of natural limits, the highest nationwide prevalence rate in the region is 2 to 3 per cent. Many areas within countries in the region already have a prevalence rate of over 5 per cent, which is the prevalence rate of the majority of countries in Africa. In countries with a low national prevalence rate, such as India, and countries with a high prevalence rate, such as Thailand, there are geographic pockets that have much higher prevalence rates. Examples of this would be parts of Manipur, parts of Andhra Pradesh, India, with rates of over 5 per cent, and parts of northern Thailand, with a prevalence rate of 10 to 15 per cent.

Another noteworthy point is the potential of an epidemic, as illustrated by the case of Thailand, which could have reached 10 to 20 per cent, had early prevention not been in place.

HIV can stay low for extended periods, even in a context of high-risk behaviour and other factors that fuel the spread of the epidemic. Several relevant time factors may lull decision makers into complacency: delays in HIV entering higher-risk networks; time for the growth of an epidemic; and the fact that geographic diffusion takes time.

***Assumption 2:** If national HIV prevalence rates are still low after all this time, there is no cause for concern, and HIV prevalence will stay low even without active and sustained interventions.*

What does low prevalence mean for the ESCAP region?

India, with an estimated national adult HIV prevalence rate of less than 1 per cent, had almost 4 million people living with HIV at the end of 2001 – the second-highest figure in the world after South Africa, where the corresponding figure was 5 million (UNAIDS 2002a, p. 190). A rise of just 0.1 per cent in the national prevalence rate in India would increase the national total of adults living with HIV by about half a million persons.

One possible worst-case scenario is that of less affected countries of the region reaching prevalence rates similar to those of more affected countries. For example, if China reaches India's current levels, that would mean 5 to 6 million PLWHAs.

Since the first AIDS case in China was reported in 1985, the disease has spread rapidly. By September 2001, all of China's 31 provinces, autonomous regions and municipalities had reported the disease (*China Daily*, 20 November 2002). Official estimates put the number of PLWHAs in China at 1 million in mid-2002, with the number of HIV-positive persons registered in the first 6 months of 2002 having risen by about 17 per cent over the same period in 2001 (UNAIDS/WHO 2002, p. 7). The Ministry of Health of China has echoed the United Nations projection that the number of people living with HIV/AIDS could rise to 10 million by the year 2010 if there is no immediate action to control the growth of the epidemic. HIV incidence rates can soar abruptly in the midst of widening socio-economic disparities and extensive migration (an estimated 100 million Chinese are temporarily or permanently away from their registered addresses) and where the virus is spreading along multiple channels.

Since HIV typically spreads from individual to individual via, inter alia, unsafe sex and the sharing of unclean needles, HIV epidemics, as discussed earlier, always begin as geographically localized outbreaks before eventually expanding across wider areas of a country.

It is also misleading to regard national HIV prevalence as an indicator of an epidemic's severity or growth potential. That yardstick does not capture high HIV infection levels among groups with high-risk behaviours. In itself, it is therefore, an inadequate early warning system.

In Myanmar, for example, national HIV prevalence is estimated at about 1 per cent. Yet prevalence rates among IDUs and sex workers are as high as 60 per cent and 40 per cent in parts of Myanmar⁴ (MAP 2001, p. 1).

In the Russian Federation, too, national HIV prevalence was just under 1 per cent at the end of 2001, but very high prevalence rates have been detected among IDUs (Russian Federal AIDS Centre 2002). A survey in the Russian city of Togliatti found 56 per cent of IDUs to be HIV-positive. Most had acquired the virus in the previous two years. Three quarters of them were unaware that they had been infected. Forty per cent of female sex workers who were also IDUs were engaged in unprotected sex with their regular partners and about 25 per cent of those sex workers engaged in unprotected sex with their clients.

⁴ UNAIDS (2002a). Myanmar registers a prevalence rate between 1.1 and 2.2 per cent in urban populations and between 0.04 and 0.07 per cent in rural populations.

Several Central Asian States are also experiencing alarming increases in HIV infections among IDUs, in part a measure of the drastic rise in illicit drug use since the early 1990s. Throughout Central Asia, young people are particularly hard hit by the epidemic. It is estimated that up to 1 per cent of the population of those countries is injecting drugs, placing the injectors and their sex partners at high risk of infection.

Assumption 3: An epidemic among vulnerable groups has no implications for wider society.

This assumption rests on the belief that there are relatively few routes for transmission from vulnerable groups to the general population (Chin 2000), leading to the notion that the epidemic among vulnerable groups holds no implications for the wider society. The evidence points to the contrary. A study in Thailand found that 17 per cent of low-income men aged 17 to 45 belonged to the so-called “bridging” population – in others words, they had sex with both sex workers and other (regular) partners (Podhisita and others 1996). Once infected, they served as a “bridge”, allowing the virus to cross into different sections of society. The study found that those men were more than twice as likely as other men to be HIV-positive and more than thrice as likely to have acquired other sexually transmitted infections (which could facilitate the transmission of HIV). The men were found to use condoms less than 30 per cent of the time with sex workers and hardly ever (less than 1 per cent of the time) with other sex partners. There is a lack of evidence to support the notion that higher infection rates among sex workers and their clients is of no relevance for the rest of society (Bloom and others 2002, p. 14).

Such findings are not limited to Thailand. Data gathered in urban areas in India show rising HIV prevalence among pregnant women, who are regarded as a low-risk, monogamous group unlikely to indulge in high-risk behaviour. This suggests that the virus is beginning to cross over to the general population.

Another study in India showed that 90 per cent of women living with HIV considered themselves to be in monogamous, single sex-partner marriages. How then were the women acquiring the virus? It appears they were infected by their spouses, who had acquired the virus through extramarital sexual liaisons (Gangakhedkar and others 1997).

Figure II.5 shows the range of prevalence rates among vulnerable groups at high risk of HIV infection. These groups are integral to society. As HIV/AIDS epidemics mature, they invariably spread into the wider society. Where socio-economic and behavioural factors favour the spread of the virus, the epidemic can then explode. The size of all these populations combined points to the potential for HIV/AIDS spread in this region. By far the largest population is that of clients of sex workers and of the female partners of these clients. It is worth

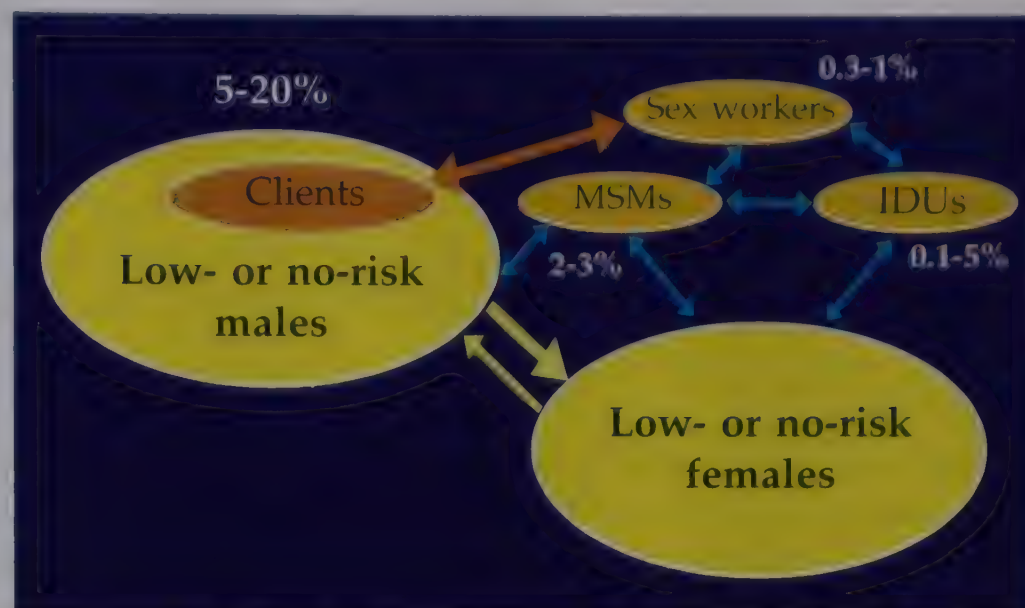
noting that over 80 per cent of women in Asia who have been infected themselves display no risk behaviours but are likely to have been infected in what they regarded as “monogamous” relationships with their husbands and boyfriends (UNAIDS 2002e).

Thus, HIV is spreading in Asia and the Pacific along several, often overlapping, routes. In addition to sexual intercourse, both heterosexual and homosexual, serious epidemics are under way among IDUs in many parts of the region. There is considerable scope, therefore, for sudden, unexpected surges in the growth of the epidemic.

Assumption 4: *Action can be delayed because the epidemic progresses slowly and requires less attention than other, more urgent development priorities.*

Another wrong notion is that action can be delayed because the threat posed by the epidemic is eclipsed by other, more urgent development priorities. Two points are worth noting here. First, the epidemic is still unfolding, given the latent phase of the disease in many places in Asia and the Pacific. Second, HIV/AIDS represents more than a discrete health challenge; it is intertwined with wider socio-economic realities. As discussed earlier, when the epidemic takes hold, it tends to exacerbate other development problems, further complicating those realities. The food crisis in southern Africa is a dramatic example of this dynamic (see box II.2).

Figure II.5. Serious localized epidemics in Asia and the Pacific



Source: Tim Brown, “Dynamics of Asian HIV epidemics”, paper presented at the Sixth International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 6 October 2001.

Box II.2. HIV/AIDS and southern Africa's food crisis

The food emergencies that have swept through southern Africa have highlighted how vulnerable many countries are to shocks that disrupt food production and consumption. In each of the affected countries, the HIV epidemic itself constitutes a shock of considerable proportion.

In early 2003, an estimated 14.4 million people faced possible starvation in the six worst famine-affected countries: Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe.

A chain of links

The food-related crisis in southern Africa was not simply a "natural" disaster caused by unfavourable weather patterns. It also stemmed from a complex web of mishaps and policy mistakes, which varied from country to country. Drought or floods; mismanagement and poor governance; misguided market reforms, a lack of extension and other support services for stricken farmers; the removal of consumer protection (allowing food prices to rocket as an emergency worsened) and political instability are among the factors involved. So is the HIV/AIDS epidemic – in every country facing a food emergency.

Where the resulting lack of availability of, or access to, affordable food is greatest, the prevalence of HIV is also alarmingly high: adult HIV prevalence rates range from 15 per cent in Malawi to 33 per cent in Swaziland and Zimbabwe.

Since the major drought that swept across southern Africa in 1992, this subregion has become home to the worst HIV/AIDS epidemic in the world. Almost 15 million people in southern Africa were living with HIV at the end of 2001 and an estimated 1.1 million had died of AIDS in 2000, the majority of them in their productive prime.

According to the Food and Agricultural Organization of the United Nations (FAO), 7 million agricultural workers in 25 severely affected African countries have died from AIDS since 1985. It warns that 16 million more could die in the next 20 years if massive and effective programmes are not mounted.

Generally, households are able to achieve food security when they can produce sufficient amounts of nutritious food, earn enough cash income to purchase food, sell or barter assets for food in hard times and rely on social support networks for assistance. The HIV/AIDS epidemic is eroding each of these coping methods. It reduces households' capacities to produce and purchase food, depletes their assets and exhaust social safety nets.

Source: UNAIDS/WHO, *AIDS epidemic update, December 2002* (Geneva, 2002).

Assumption 5: Antiretrovirals make HIV an easy-to-manage chronic disease.

Have antiretrovirals (ARVs) made HIV an easy-to-manage chronic disease? A number of drug treatments and therapies have been developed that enable PLWHAs to stay healthier and live longer. Classed either as ARVs or inhibitors, depending

on their function, these drugs are widely available in North America and Western Europe. Elsewhere in the world, they reach only a tiny fraction of the millions who need them. ARV treatments can prevent or slow the onset of debilitating AIDS-related illnesses and significantly prolong life. There are indications that ARV treatment might also reduce the likelihood of HIV transmission by lowering a person's viral load (Newell 2001). ARV drugs also help to reduce the risk of mother-to-child transmission. In addition, other treatments have been developed to manage opportunistic infections that threaten individuals with HIV-damaged immune systems.

These treatments are not, however, a cure for HIV/AIDS. In addition, ARV regimens are lifelong. The complications arising from non-adherence and the possible side effects of long-term treatment are not yet well understood. In the meantime, the cost of ARVs, along with other factors, is keeping them out of the reach of the vast majority of people who need them. While the treatment and care of

Box II.3. The ART of living

One of the most harmful myths associated with the HIV/AIDS epidemic is that infection is tantamount to an "automatic death sentence". In recent years, ARV drugs have given millions of HIV-affected people great reason for hope. Taken in combination (called cocktail or combination therapy) under specialized medical advice, these drugs drastically reduce the viral load in blood. However, they do not permanently cure one of HIV. Although many positive persons and caregivers have welcomed these drugs, others have experienced serious side effects.

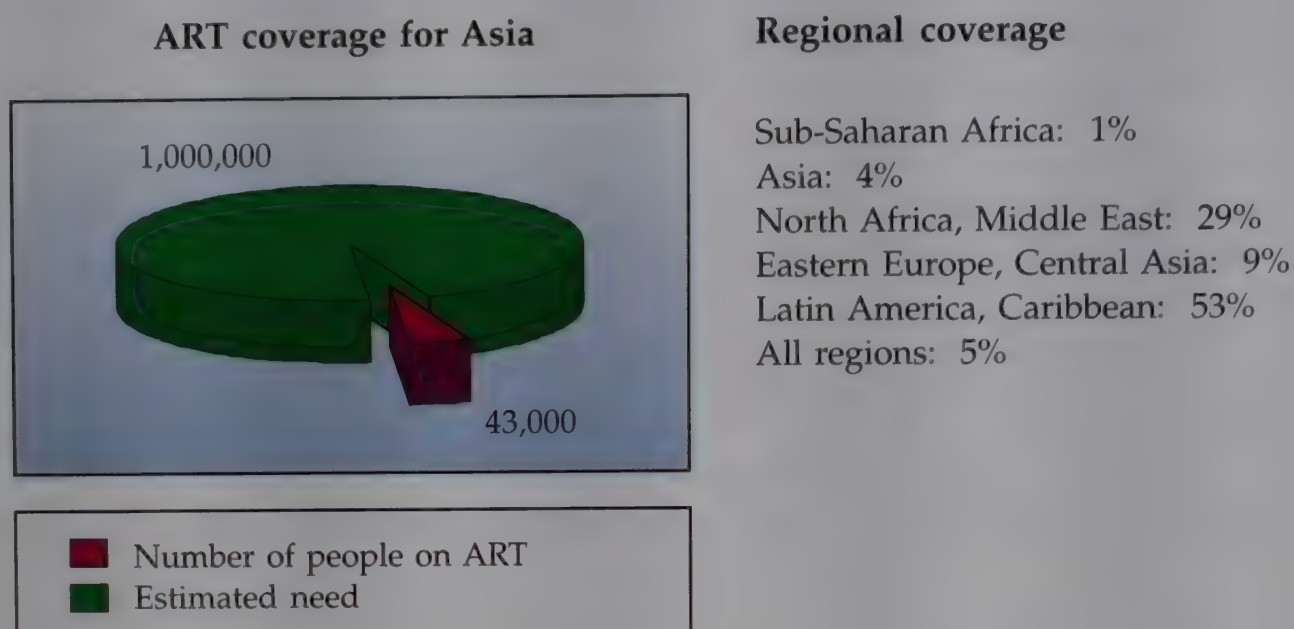
This line of treatment, called HAART (highly active antiretroviral therapy) has indeed resulted in a huge reduction of AIDS-related deaths, particularly in high-income countries where patients have easier access to the therapy. Even in resource-poor settings, consolidated data from 7 Médecins Sans Frontières projects in Asia, Africa and Central America showed that among 743 patients given ARV therapy for 6 months, the probability of survival was 93 per cent ("Equitable access: Scaling up HIV/AIDS treatments in developing countries", Médecins Sans Frontières, 2002). In Brazil, universal access to free ARV treatment led to a 54 per cent reduction in AIDS deaths between 1995 and 1999 (National AIDS Policy, Ministry of Health of Brazil, http://www.aids.gov.br/assistencia/aids_drugs_policy.htm 2001).

However, only a tiny proportion of people who need ARV therapy elsewhere in the world receive such treatment. In Asia and the Pacific, a mere 4 per cent of the estimated 1 million people who need these drugs, currently have access to them.

(Continued overleaf)

(Continued from preceding page)

Coverage of antiretroviral treatment (ART) for adults in Asia, December 2002



Source: International HIV Treatment Access Coalition (ITAC) (<http://www.itacoalition.org/>, 2002).

High prices have been the single biggest obstacle to providing ARV drugs to people living with HIV/AIDS. The main patent-holding manufacturers resisted calls for lower prices and were reluctant to license production to other manufacturers. In early 2000, for example, a year's supply of ARV medicine cost between US\$ 10,000 and US\$ 12,000 per person. Since then, prices have dropped dramatically to just US\$ 700 per person per year. One of the most significant reasons for the fall in prices has been the rise of competition from generic drug producers in India, Thailand and Brazil. In mid-2002 generic drug producers were offering ARV triple combination drugs at just US\$ 209 per person per year (Médicins Sans Frontières, op. cit.).

The fall in prices has already enabled countries like Thailand to announce bold new schemes to start providing ARV drugs to thousands of HIV-affected people virtually free of cost. The Government of Thailand plans to include the provision of these drugs as part of its 30 baht public health insurance scheme soon. In many other HIV-affected countries though, despite the lowering of prices, the therapy is still too expensive for governments to provide it free or for patients to purchase it on their own.

In the years ahead, there is a possibility that even the recent trend towards a lowering of prices may not continue for long. By 2005, if India and Thailand were to be compelled to implement the World Trade Organization's TRIPS Agreement, generic drug makers in both countries might no longer be able to export their products.

people living with HIV/AIDS is a necessity (and viable in countries with low prevalence rates), universal access to ARV treatment in countries experiencing severe epidemics would almost certainly exhaust their current national health budgets. Furthermore, even if none of these became reality, the prevention of new HIV infections obviously would remain an essential and cost-effective element of a successful response.

None of the assumptions and misconceptions reviewed here survive scrutiny. Yet they continue to be used as an alibi for complacency or inaction in many parts of the region, with deadly consequences for millions of people.

C. Conclusion

HIV/AIDS has acquired a dynamic presence in Asia and the Pacific.

The world's fastest-growing HIV/AIDS epidemics are now raging in this region. In several countries, including the most populous ones in the world, the spread of HIV as recently as five years ago, had been limited and was confined to small geographic pockets and especially vulnerable groups. These countries are now seeing an alarming increase in the spread of the infection.

Open discussion of sex and sexual behaviour is taboo in many societies in the Asian and Pacific region, thus making it difficult to squarely address issues of sex and sexuality. Unsafe sex, casual sex, multiple sex partnering, male-to-male sex, use of sex worker services and sexual abuse and violence are rarely discussed. Such taboos seriously hamper prevention efforts. Silence kills.

Spreading alongside the HIV/AIDS epidemic is a host of unfounded assumptions that encourage denial, complacency and inaction. They include the notions that the spread of the epidemic has a natural peak, that prevalence levels will remain low, that the infections will stay within certain groups characterized by high-risk behaviour, that the urgency of the disease pales in comparison with other development priorities and that the availability of ARVs is sufficient to manage the problem. The validity of these assumptions is highly questionable, a fact which must inform any HIV/AIDS response.

Unless national Governments and the international community launch an expanded and comprehensive response to the epidemic, there could be 18.5 million new HIV infections in Asia and the Pacific by 2010.

Subsequent chapters will look at the essential and strategic responses needed to avert new infections, the importance and cost-effectiveness of early intervention and the availability of a proven package of measures to pre-empt the possible catastrophe that could engulf the region.

CHAPTER III

PEOPLE'S VULNERABILITY: CHALLENGE TO LEADERSHIP

*"Knowing is not enough; we must apply.
Willing is not enough; we must do."*

Goethe

A. Transmission trends and vulnerable groups

1. Predictable transmission trends

It is now well established that HIV/AIDS generally follows a predictable path, although the speed and eventual extent of its spread varies depending on the specific circumstances of a country (UNAIDS, 2002a). Broadly, there are two phases in an epidemic.

In phase one, the virus is introduced into a country, and is usually transmitted mainly among individuals or groups with higher levels of those behaviours that facilitate HIV transmission (e.g., selling and using sex services, sex between men and injecting drug use). The virus then spreads widely among those at higher risk. Comparatively small investments in prevention and care during this phase can reap huge benefits.

In phase II, the virus spreads to lower-risk partners of these individuals, thus establishing itself in the wider population. Once a substantial number of people are HIV-positive, the epidemic can then spread even more widely. The costs of prevention and care swell dramatically during this phase.

Some groups (such as IDUs, sex workers, MSMs, mobile populations and prisoners) are particularly vulnerable to HIV/AIDS, not least owing to the widespread stigmatization and discrimination

that they experience. Their perceived association with HIV/AIDS often invites further discrimination, trapping them in a vicious cycle of prejudice and forced secrecy that blocks prevention efforts. As a result, they are left especially prone to the epidemic. Furthermore, there exists in many countries the belief that HIV/AIDS will not cross a supposed divide between vulnerable groups and wider society. Reality, however, belies this.

2. Vulnerable groups

(a) Hidden epidemic of injecting drug users

An estimated 10 million people worldwide inject drugs (UNAIDS 2002a, p. 93). The problem has increased markedly in several countries of the ESCAP region, fostered by rapidly changing economic and social conditions.

Two of the world's major drug production sites are located in the ESCAP region. Injecting drug use is often closely associated with the availability and purity level of drugs for injection. Thus, the spread of injecting drug use closely follows shifts in trafficking routes from the production sites to markets.

The availability of high-grade injection drugs and their proximity to drug production sites are a major influence on the spread of injecting drug use, and consequently HIV. The political and economic context of a country can exacerbate the problem of drug use and the spread of HIV. Once HIV spreads through injecting drug use, the solutions no longer lie in legal and punitive measures aimed at drug supply reduction. However, in practice, most efforts translate into strong-arm, punitive measures in a legal approach to eradicate "social evils" through a show of force which drives IDUs further underground and makes them harder to reach. This hides the HIV epidemic among IDUs (Reid and Costigan 2002).

In recent years, with the failure of the legal-punitive approach, efforts are increasingly under way on an alternative approach that focuses on harm reduction. This approach is premised on recognition of the nature and patterns of drug abuse. It involves reaching out to drug users by offering services that they otherwise have no access to, whose most significant effect is containment of the spread of HIV. The services offered in harm reduction include

the provision of sterile injection equipment, substitution treatment, as well as related information, education and communication through the involvement of IDU communities, including as peer educators.

Since drug use is illegal in most countries, estimates of the number of IDUs and of HIV-positive IDUs vary considerably. However, the most conservative estimate for the IDU population in the ESCAP region numbers in the millions (Sarkar and others 2003). Data also show that HIV prevalence among IDUs could be as high as 54 per cent in pockets of Thailand, 85.7 per cent in pockets of China, 80 per cent in pockets of India and 89 per cent in pockets of Viet Nam.

The sharing of needles and syringes among IDUs remains one of the most certain ways of transmitting HIV. During the 1990s, many areas in the ESCAP region witnessed an explosion in HIV prevalence rates among IDUs. Today IDUs account for 65 per cent of the cumulative total of HIV reported cases in Viet Nam (ESCAP 2003a). In Thailand, about 20 per cent of new HIV infections are attributed to injecting drug use, with the estimated number of IDUs ranging from 80,000 to 110,000, and possibly accounting for 30 per cent of new infections by 2005 (ESCAP 2003a). In areas where injecting drug use is well established, such as Manipur in north-eastern India, Yunnan in south-western China, Myitkyina in northern Myanmar and several urban areas in Thailand, prevalence rates of up to 40 per cent have been detected (MAP 2001 p. 2).

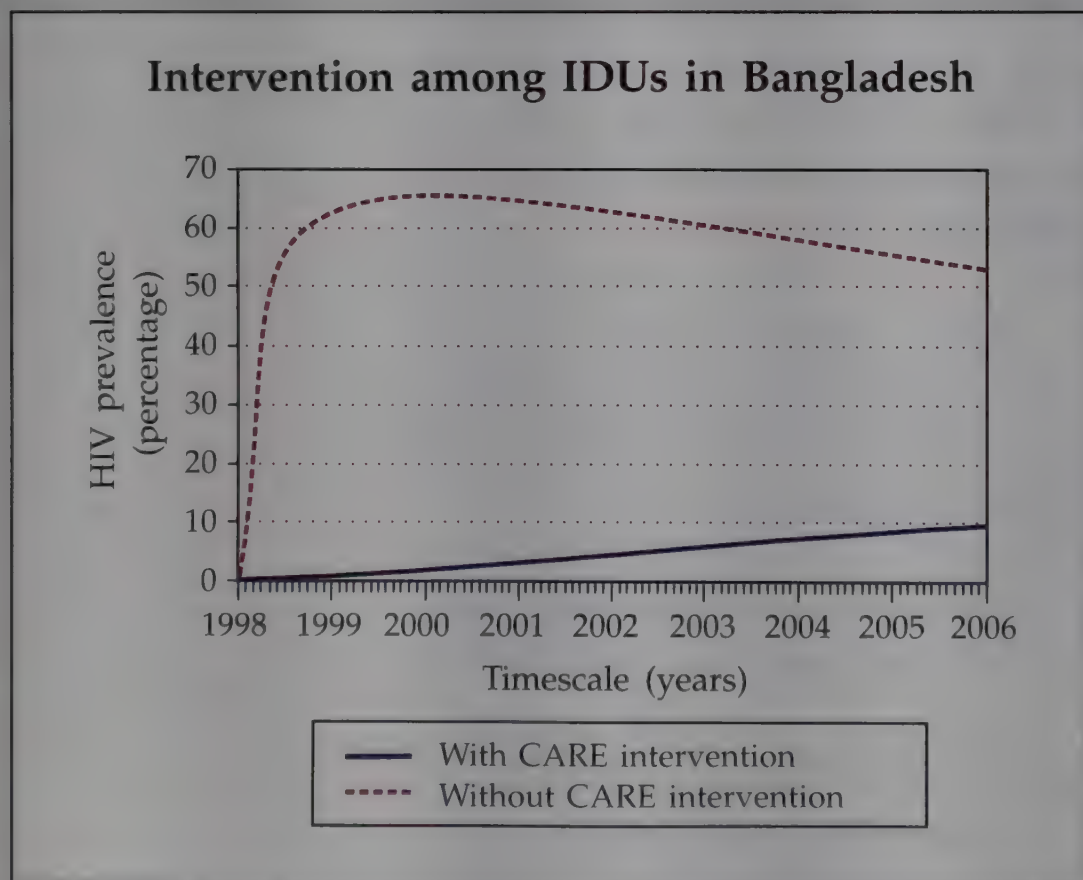
Across Central Asia, in addition to the danger of HIV infection through sharing needles and syringes, at times the practice of mixing blood (to preserve the drug's potency) into the initial supply of the drug before it is distributed puts IDUs at special risk.

Sharing needles and syringes is not the only risk. Young and generally male, most injectors are also sexually active. Evidence from Jakarta shows that many IDUs have casual sex with multiple partners, usually without using a condom (MAP 2001 p. 13). In Cebu City, Philippines, over two thirds of male IDUs claimed that they shared needles and nearly two thirds of those who were sexually active admitted to never using a condom (Amadora-Nolasco and others 2002 p. 137). In Da Nang, Viet Nam, over 20 per cent of IDUs had paid for sex in the previous year, while in Hanoi the figure was nearly 25 per cent (MAP 2001, pp. 12-13). Most of them did not use

condoms. By comparison, depending on location, between 50 and 75 per cent of male IDUs in Bangladesh paid for sex with women and nearly 10 per cent paid for sex with other men. Fewer than 25 per cent of them had used a condom the last time they had had sex. Such a convergence of unsafe sex and injecting drug use boosts the likelihood of HIV transmission, not least in countries where repressive legislation and social sanctions drive IDUs and sex workers underground.

Box III.1. Prevention works among IDUs!

The CARE-SHAKTI project is one of the largest HIV/AIDS prevention projects in Dhaka. In that project, interventions among IDUs yielded significant results. IDUs themselves are given an important role as peer educators and in outreach programmes whose services include needle exchange. Thus, a combination of needle exchange, awareness-building and other measures helped to prevent HIV prevalence among IDUs from soaring to a projected high of 60 per cent in 2003. As a result of those interventions, the current prevalence rate is about 7 per cent, as shown by the figure below:



Source: Lorna, Guinness and others, "Modelling the impact and cost effectiveness of CARE-SHAKTI: an HIV prevention programme for injecting drug users and safe sex workers in Bangladesh", (n.d.).

Non-paid sex partners are also at considerable risk. In parts of China, India and Myanmar, women are more likely to be infected with HIV through sex with a drug user than through any other means. Approximately 45 per cent of the wives of IDUs in Manipur, India, were found to be HIV-positive (ESCAP/UNDCP/UNAIDS 2001, p. 3).

(i) Programmes that work

Recently, a number of countries (including Bangladesh, China, India, the Islamic Republic of Iran, Nepal, Pakistan, Thailand and Viet Nam) have introduced needle and syringe programmes, albeit on a small scale (Reid and Costigan 2002, p. 14). Countries such as the Russian Federation have set up new programmes to tackle HIV infection. More health-care centres in the region are now offering voluntary testing and

pre- and post-test counselling. Kazakhstan is implementing successful education and HIV-testing initiatives that are helping to curb the epidemic (AMFAR 2000). However, such IDU-friendly services are still limited in most of the ESCAP region.

Methadone substitution or buprenorphen treatment programmes are not widely available. Exceptions to this include methadone substitution or buprenorphen treatment programmes in Hong Kong, China, as well as parts of India and Thailand. Generally, there is also poor health-care service coverage of IDUs. Where health-care services are available, they may not be accessible in an IDU-friendly manner.

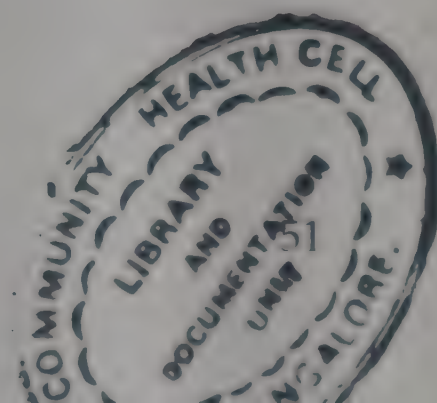
Programmes directed at IDUs and HIV mitigation are most successful when policy and legislation are supportive and police practices facilitate outreach work and the provision of services (UNAIDS 2002a, p. 95). Fortunately, some Governments are now acknowledging the linkage between drug use and sex work and have embarked on programmes that address this linkage.

There is an array of success stories in harm-reduction programmes run by non-governmental organizations which have helped to limit the spread of HIV through injecting drug use.

Successful projects such as the CARE-SHAKTI project in Bangladesh or the needle-exchange project in Kolkata share several distinct features. IDUs themselves play an important role as peer educators, and outreach programmes include services such as needle exchange.

The CARE-SHAKTI project also provides user-friendly STI (sexually transmitted infection) treatment services and runs peer outreach programmes that promote condom use. It fosters a supportive environment for peer education, self-organization and community development activities by sex workers, with positive outcomes (Guinness and others n.d.). In some cases, drug treatment programmes (including detoxification and provision of substitute drugs such as methadone or buprenorphen) have proved effective. Under the methadone treatment programme of the Bangkok Metropolitan Administration, the prevalence of HIV among IDUs is lower than the overall national prevalence for Thailand as a whole with such a treatment programme not existing for most places in the country (see box III.2).

People's vulnerability: challenge to leadership

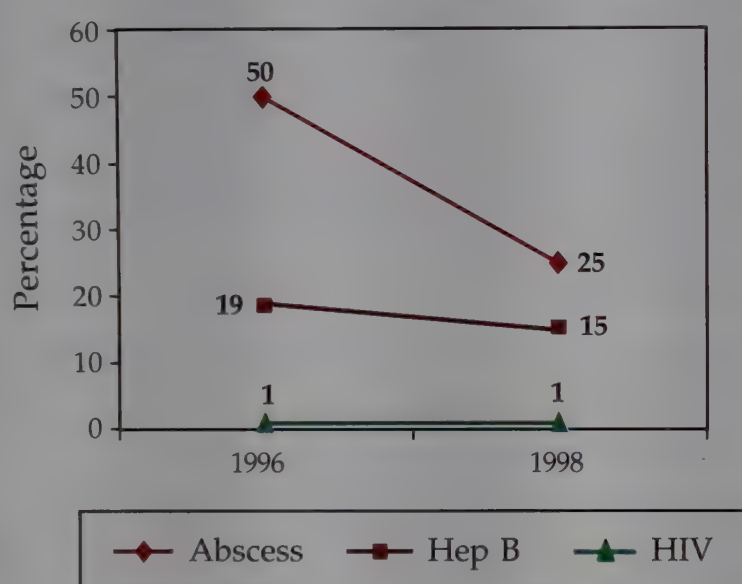


Box III.2. Success in two cities

Success similar to that of the CARE-SHAKTI project was achieved through a needle-exchange programme in Kolkata (Calcutta), India. The Kolkata programme helped to lower, among IDUs, the secondary infection associated with injecting, such as abscesses, from 50 per cent in 1996 to 25 per cent in 1998, while maintaining a low rate of HIV (see figure A below). Similarly, figure B below shows how another programme worked in Thailand. HIV prevalence rates are lower in the clinics of the Bangkok Metropolitan Administration, where a methadone treatment programme was offered than in Thailand as a whole.

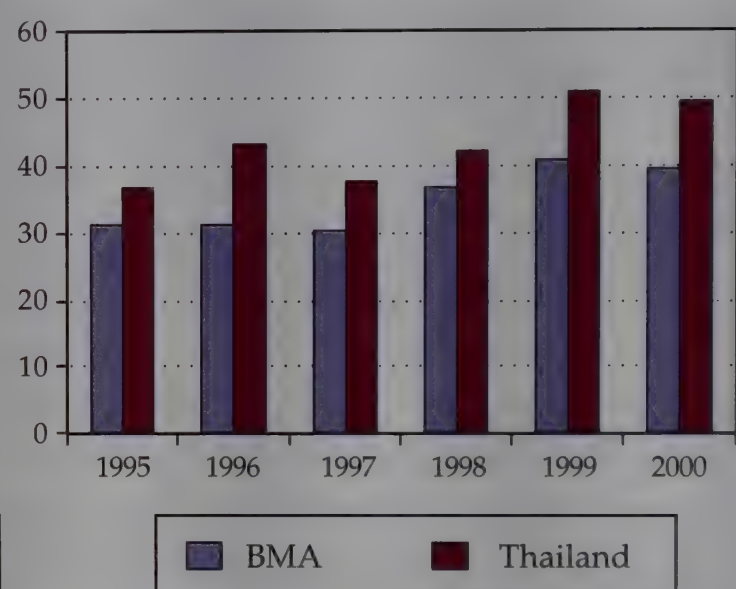
A. Needle exchange programme, Kolkata

Peer outreach and needle exchange programme Kolkata, India
(US \$ 3/month)



B. Methadone treatment programme, Bangkok

Comparison of HIV percentages among BMA clinic attendees and for Thailand, 1995-2000



Sources: For figure A, S. Panda and others, "Drug use among the urban poor in Kolkata: behaviour and environment correlates of low HIV infection", *The National Medical Journal of India*, vol. 15, No. 3, 2002, pp. 128-134. For figure B, UNAIDS, *Best Practice on HIV Prevention among IDUs in Asia*, 2003 (in press).

(ii) Critical coverage is essential

For prevention services to have a discernible impact, it is necessary to achieve minimum coverage of 50 to 60 per cent of a vulnerable group. It is equally important to create and maintain an enabling legal and social environment, to facilitate access to prevention measures (such as needle exchange and drug treatment) and clinical services (such as treatment of overdoses, primary health care,

testing and counselling and ARV therapy). Pragmatism and flexibility in the implementation and practice of the law are necessary to allow harm-reduction strategies to work. Otherwise, it would be very difficult to run these programmes and hence difficult to reduce the vulnerability of IDUs to HIV/AIDS.

With regard to IDUs and prevention of the spread of HIV/AIDS, the vulnerability of IDUs along the continuum of production site, trafficking site and destination site must be recognized. IDUs exist at all sites and are vulnerable everywhere. The situation warrants a comprehensive approach that has political support, to address the vulnerability of IDUs all along this continuum. A comprehensive approach will produce more successful results than a strictly public order and legal approach.

(b) Sex workers: resisting discrimination

Across the Asian and Pacific region, sex work is regarded with contempt and sex workers tend to be despised. Stigmatized owing to their means of livelihood, sex workers usually live on the margins of society and have low social status. Sex workers are often young, generally poor, have had little or no education and tend to come from rural or other deprived areas. Many depend on sex work to support their parents and families.

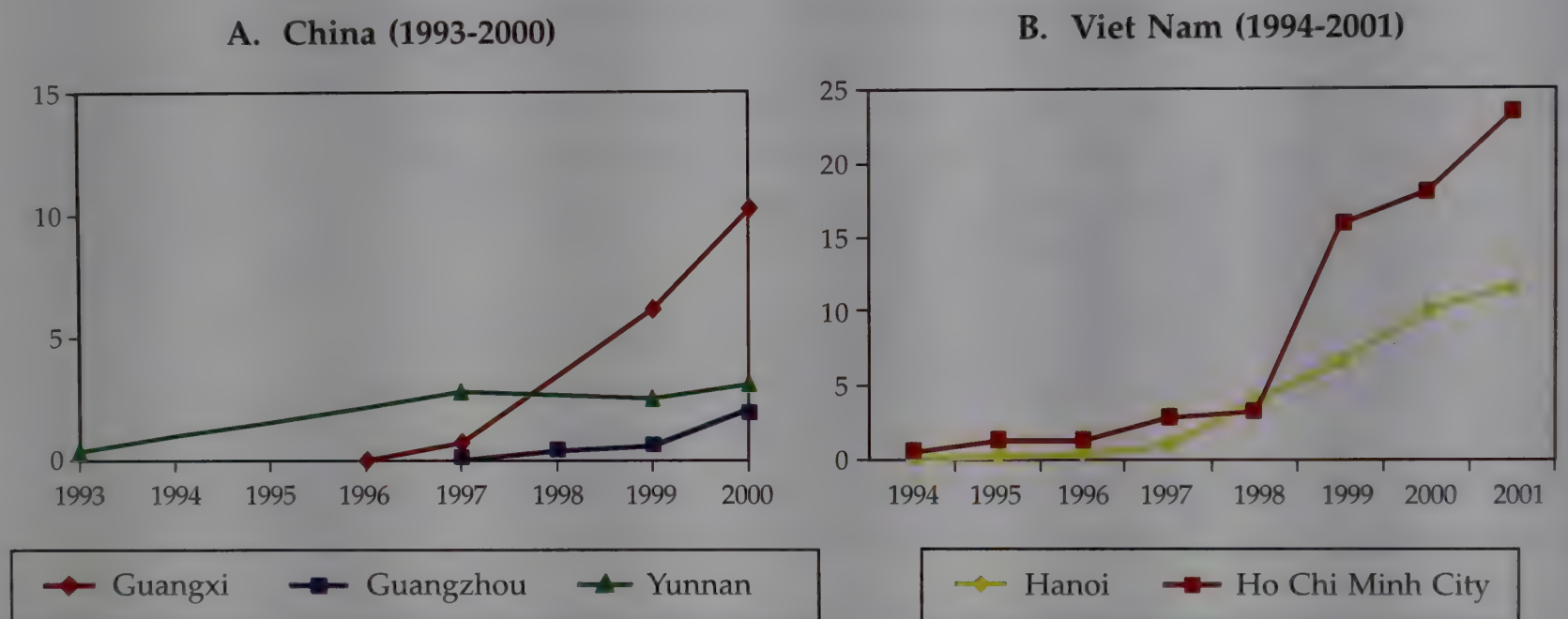
In cities of the region, there is a growing phenomenon of urban young people who engage in sex work, either occasionally or regularly, to support a lifestyle marked by designer goods. They tend to be better educated and more sophisticated than sex workers from the rural areas, but are no less vulnerable to HIV infection.

In most countries, sex work is illegal. As a result, sex workers often live and work at the discretion of the local police. In some places, policemen may use their authority to arrest, fine or imprison women and coerce them into having sex. In other places, being in possession of a condom is taken as sufficient evidence that a person engages in illegal sexual activity. Such harassment and discrimination leave sex workers particularly vulnerable to HIV/AIDS, not least because it makes it difficult to reach them through prevention programmes. The police force is therefore a vital link in effective HIV/AIDS prevention programmes among sex workers.

In countries where heterosexual sex is the main mode of transmission, the epidemic typically starts by spreading among sex workers and their clients, before being transmitted to the wider

population. Once HIV is introduced into sex worker populations, HIV prevalence rates have been known to rise steeply and within a fairly short period. For example, the prevalence rate among sex workers in Guangxi, China, rose from almost 0 in 1996 to nearly 10 per cent in 2000 (figure III.1.A). Similarly, the prevalence rates among brothel-based sex workers in Thailand rose from a mere 3.5 per cent in 1989 to 33 per cent by late 1994. In Mumbai, India, rates skyrocketed from just 1 to 51 per cent between 1987 and 1998. In Viet Nam's main cities of Hanoi and Ho Chi Minh City, HIV prevalence rates rose sharply in the late 1990s (figure III.1.B). The rates in parts of Myanmar jumped from 4.3 to 18 per cent in the three years from 1992 to 1995 (Rogers and others 2002, p. 218).

Figure III.1. Rapid prevalence rate increase among sex workers in China and Viet Nam



Sources: Presentation at the WHO Regional Partners Meeting on Harm Reduction, Hanoi, 2002; and Viet Nam surveillance data presented at the MAP Networking Meeting, 2002.

(ii) Others at risk

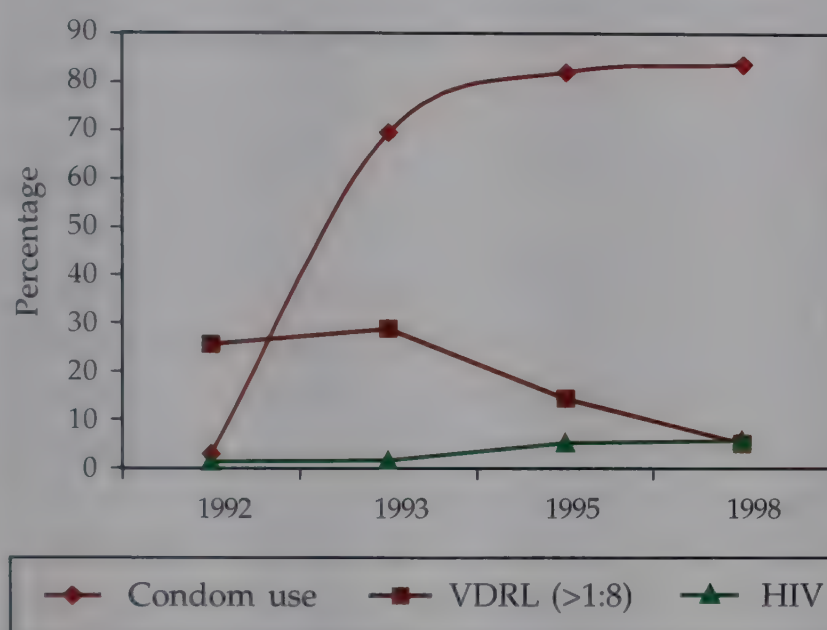
At risk are not only sex workers, but also the partners and the families of the millions of clients who visit them. In the absence of effective prevention strategies, a steep rise in the HIV/AIDS prevalence rate among sex workers signals a likely increase in the wider population (ESCAP 2003a).

One third of sex workers in Hanoi and Ho Chi Minh City did not consistently use condoms, whether with clients or with non-paying sex partners. A study among Indonesian female sex workers revealed that only 5.8 per cent consistently used a condom every time they had sex over a two-week period and just 1.4 per cent did so over a four-week period. Sex workers generally did not insist on condom use for fear of annoying prospective clients and losing their patronage. Among the reasons that they cited for not insisting

Box III.3. Prevention works among sex workers

Experience in both South and South-East Asia proves that it is indeed possible to prevent HIV infection among sex workers and their clients. Both the government-led 100 per cent condom programme in Thailand and the Sonagachi project of Kolkata, India, offer instructive lessons.

Sex Worker Intervention – Sonagachi



In the 100 per cent condom programme approach, the Ministry of Public Health and the police collaborate closely to ensure that brothel management and sex workers comply with the government directive to use condoms. This collaboration is reinforced by a massive campaign targeted at the clients and potential clients of sex workers. With its primary focus on condom use by the clients of sex workers, significant success has been achieved in controlling new infections.

The intervention programme for sex workers in Sonagachi brothels, Kolkata, India, was initiated by the Ministry of Health, in collaboration with WHO, and the All-India Institute of Public Health, Kolkata. It adopted a community development approach. Self-organization of the sex workers, peer education, advocacy with local "power structures" (including pimps, gangs and other vested interest groups), as well as the state authority, are the mainstay of the Sonagachi project. In addition, STI treatment services and condom promotion and distribution are also key features of the project. Community development activities for the children and families of the sex workers, and for local communities, have also been introduced.

Source: S. Jana, "Sonagachi sex workers' intervention project", Kolkata, India, 1998, mimeographed.

on condom use were misconceptions that boyfriends, native Indonesians and "healthy-looking" clients could not possibly be carrying HIV. Moreover, pimps did not encourage condom use for fear that potential clients would take their "business" elsewhere (Basuki and others 2002, pp. 102-103).

In Beijing, studies found that most female sex workers shared the belief that HIV/AIDS did not pose a significant threat to them. Many lacked accurate knowledge of the virus and STIs, and over a third said they did not have access to condoms. Although 74 per cent had undergone a medical examination in 2001, just 10 per cent had received prevention information (Rogers and others 2002, pp. 217 and 223).

In both the above-mentioned cases, the sex workers were aware of the risks, but thought cleanliness and "healthy-looking" clients were sufficient protection against HIV (MAP 2001, p. 12).

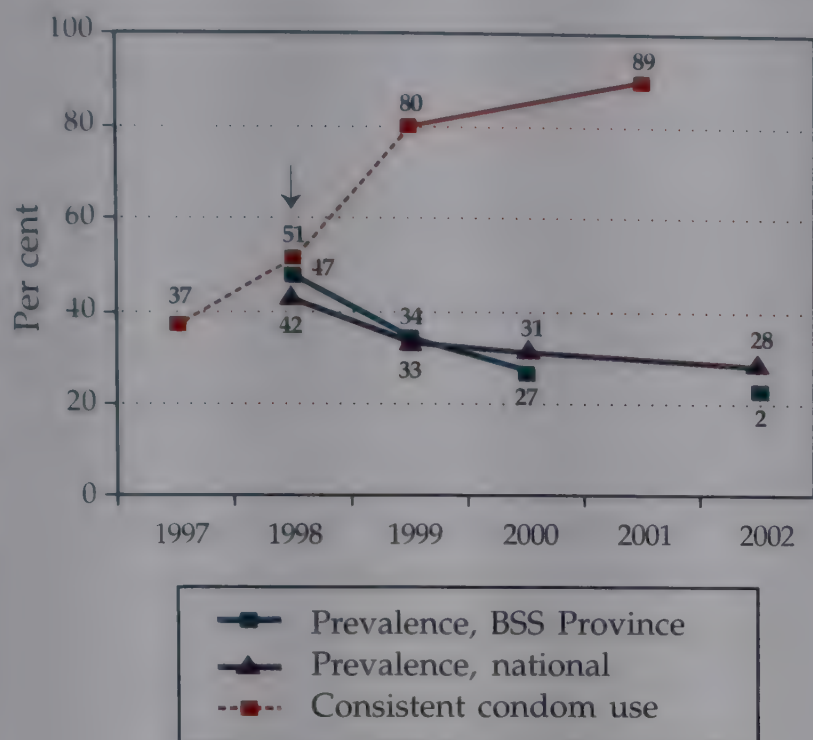
(iii) Lessons learned

The success stories discussed above have one lesson in common. Behaviour change among clients is vital if the success of such programmes and projects is to endure. For this, prevention interventions must reach a large proportion of the sexually active population. Figure III.2 shows that, in Cambodia, HIV prevalence rates in the provinces, and nationally, declined only after the number of people using condoms consistently exceeded 50 per cent of the population. This shows that the overall impact of such interventions grows only once a certain scale of coverage is achieved.

The success stories also show that the response to HIV/AIDS among sex workers requires a multifaceted approach. It can be a community development approach or a government-led approach. In a community development approach, sex workers can play a strong protagonist role: they organize themselves and become involved as peer educators and community service providers. Even in such an approach, it is necessary to ensure the provision of user-friendly services to which sex workers have easy access.

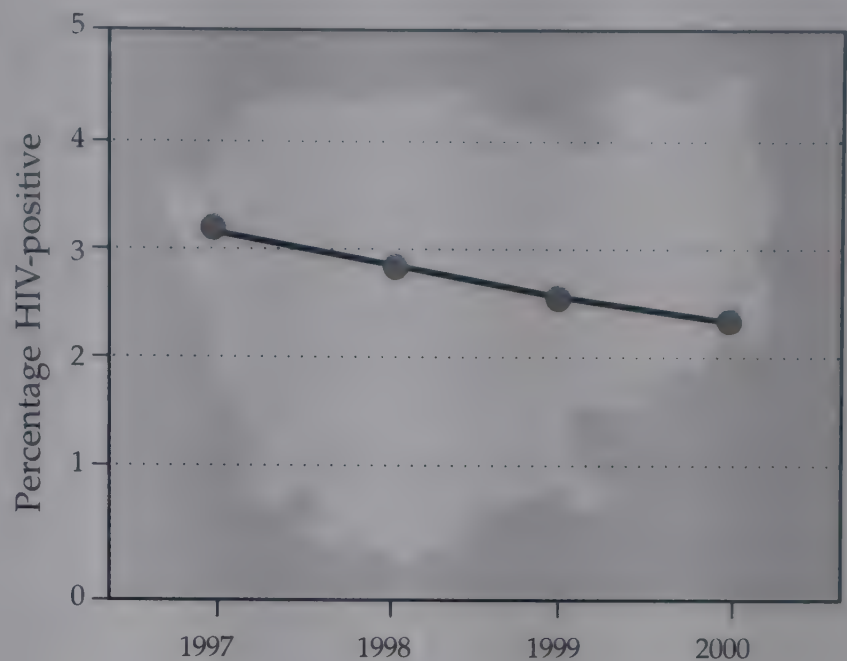
More important, the replicability of both models has been demonstrated. The 100 per cent condom programme (focusing primarily on condom use by clients of sex workers), pioneered by the Government of Thailand, has been replicated in Cambodia, and the Sonagachi project of Kolkata, India, has been replicated in the

Figure III.2. Critical coverage to reduce prevalence



BSS: Behavioural Surveillance Survey.

Source: National Aids Programme, Cambodia, as quoted in UNICEF, "A regional update of UNICEF action, HIV/AIDS, children and youth, mothers and babies in East Asia and the Pacific" (Bangkok, UNICEF, December 2002).



CARE-SHAKTI project in Bangladesh, both within a short time. Both replicated projects registered fairly high success rates. However, a recent study conducted in Cambodia recommended a combination of both approaches for more effective outcomes. Cambodia's experience confirms that HIV prevention among sex workers could be more effective when 100 per cent condom use programmes are mounted along with other "supportive efforts" that characterize Sonagachi and CARE-SHAKTI. That approach combines the 100 per cent condom programme with outreach and STI treatment services, community involvement in programme design and delivery and the creation of enabling environments for self-organization by sex workers.

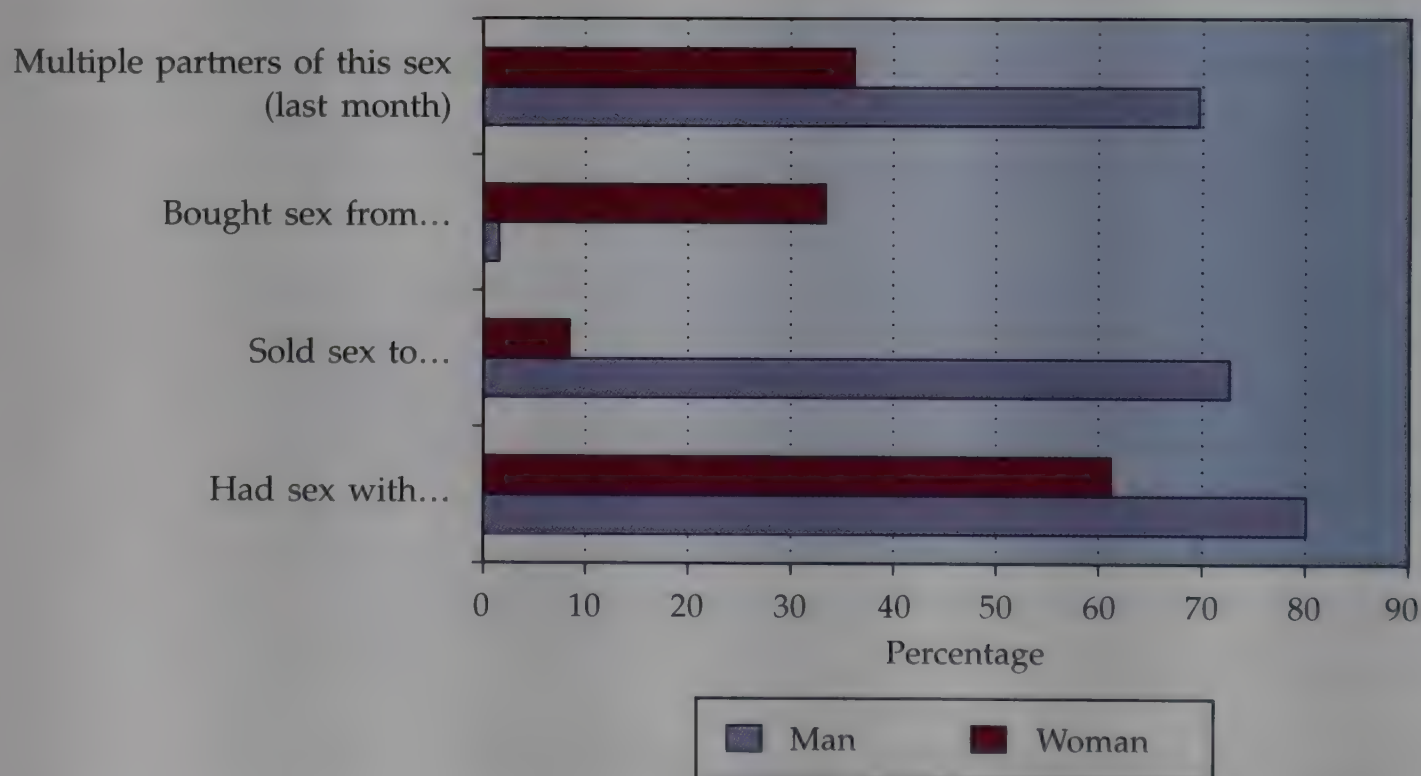
(c) *Casting aside the shroud of secrecy: men who have sex with men*

In most countries of the ESCAP region, MSMs endure social scorn, official harassment and institutional neglect. As in the case of sex work, sex between men is prohibited in many countries of the region (Human Rights Watch 2002). Although there may be denials that MSMs exist, sex between men occurs in all societies.

A recent study of MSMs in Fiji, Samoa and Vanuatu found that many of them had little or no understanding of how HIV and STIs were transmitted. They also knew little about how to prevent infection. Many practised unsafe sex, with 17 per cent of Samoan MSMs saying that they did not use condoms (Keith-Reid and Tuqiri 2002).

Where HIV prevalence among MSMs has been measured, high rates of infection have been detected. The data in figure III.3 come from a study of over 200 MSMs in Cambodia. Most of these men sell sex to men, but over 60 per cent also have sex with women, and many patronize female sex workers. Fewer than half of the men who sold sex used a condom with their last paid partner (MAP 2001, p. 20). Similar levels were found among Thai male sex workers. Prevalence rates among MSMs in several Malaysian states are around 10 per cent, while 3 out of 10 sentinel sites in the Philippines have recorded HIV infections in MSMs. Among Japanese MSMs, HIV infections increased sharply in the late 1990s, accounting for twice as many infections as in heterosexual men (MAP 2001, pp. 4-5; National

Figure III.3. MSMs in Cambodia: sexual contact between men and different partners in a period of six months



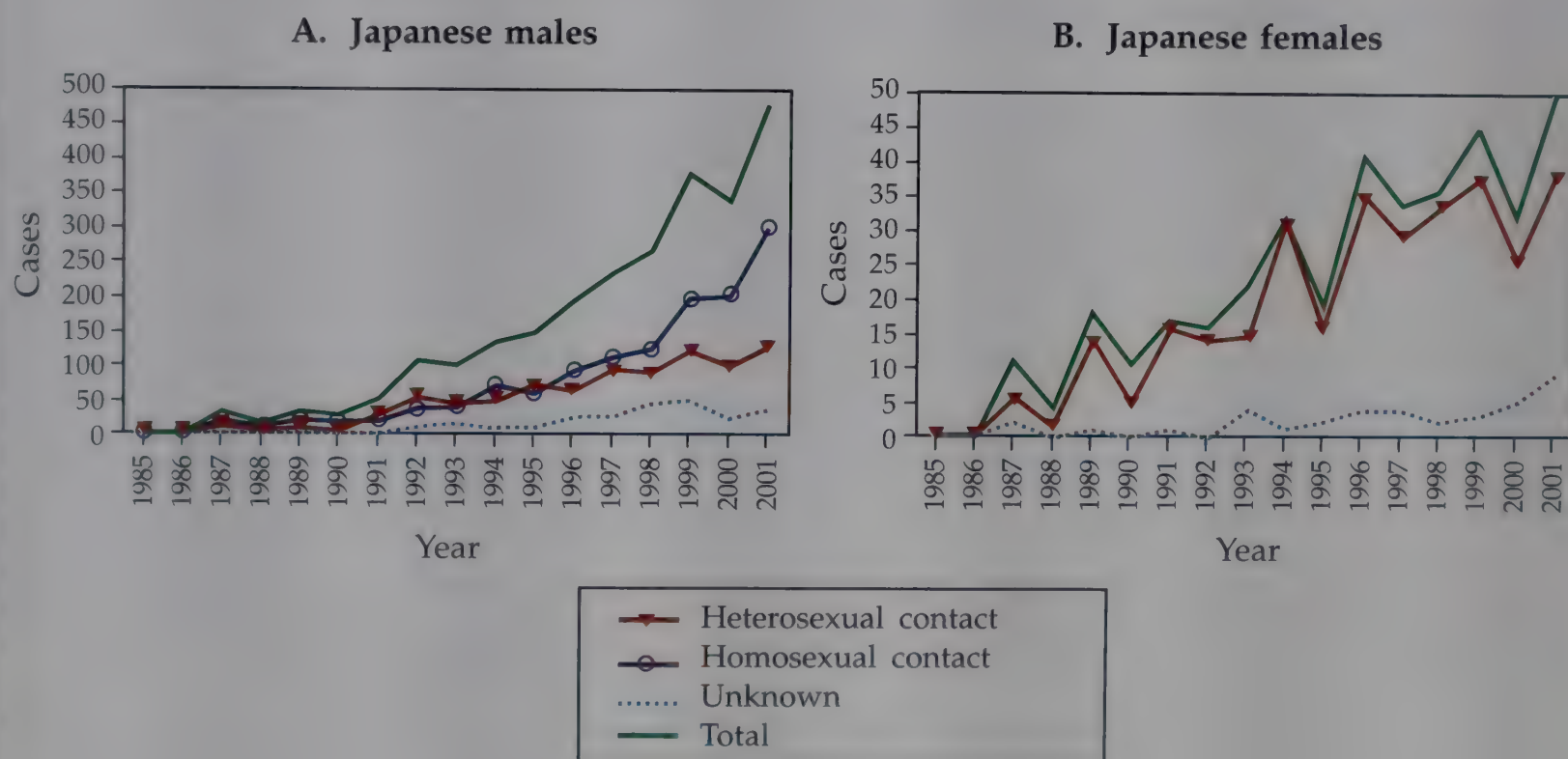
Source: MAP (Monitoring the AIDS Parpidemic), *The Status and Trends of HIV/AIDS/STI Epidemics in Asia and the Pacific* (Washington, United States Bureau of the census 2001).

Box III.4. Shifting trends, changes in vulnerability

In Japan, the high percentage of haemophilia-related AIDS cases as the distinctive characteristic of HIV infection has given way to newer trends in transmission. HIV infection is now principally through sexual contact. Injecting drug use and mother-to-child transmission accounted for less than 1 per cent of infections.

The number of Japanese men living with HIV who acquired the virus through homosexual contact has increased markedly. Homosexual contact accounted for 63 per cent and heterosexual contact 26 per cent of infections in 2001 (see figure below). New cases of Japanese men living with HIV who had been infected through homosexual contact formed a peak among those aged 25 to 29 years. An increase among those in their 20s and 30s is also noteworthy. The peak in age distribution of new HIV infection among Japanese men who acquired the virus through heterosexual contact is seen among those aged 30 to 34 years in 1999, 35 to 39 years in 2000 and 25 to 29 years in 2001. Another alarming trend is the shift of infection to a younger generation of women, from those aged 25 to 29 years (between 1998 and 2000) to those aged 20 to 24 years in 2001 (see figure below). The reported cases of people living with AIDS have increased every year, except in 1998. The reporting decreased once in 2000 and then increased again to the largest number in 2001.

Gender and mode of infection of new HIV cases, Japan, 1985-2001



Source: National Institute of Infectious Diseases and Tuberculosis and Infectious Diseases Control Division, Ministry of Health, Labour and Welfare, Japan, 2002. National Epidemiological Surveillance of Infectious Diseases: data based on the reports received before 27 February 2002, *Infectious Agents Surveillance Report*, 2002, vol. 23, No. 5 pp. 109-110 (<http://idsc.nih.go.jp/iasr/23/267/tpc267.html>).

Institute of Infectious Diseases and Tuberculosis and Infectious Diseases Control Division, Ministry of Health, Labour and Welfare, Japan, 2002) (see box III.4).

Studies in countries as diverse as Cambodia, India, Pakistan and Thailand confirm that men who have unprotected sex with men also have unprotected sex with women (UNAIDS 2002a). A Cambodian survey found that 60 per cent of MSMs also had sex with women, with many visiting female sex workers (see figure III.3). Studies in northern Thailand indicate that MSMs are likely to have twice as many female partners as heterosexual men and are more likely to have unprotected sex with sex workers. The virus will eventually spread to their female partners who, in turn, can transmit it to others. The notion that an HIV epidemic among MSMs will remain restricted to that group is clearly misplaced (MAP 2001).

Box III.5. Success in reaching the unreached

“Bandhu” and “Sahodaran” of Bangladesh

The “Bandhu Social Welfare Society” and “Sahodaran” Dhaka are two non-governmental organizations that have undertaken excellent work with MSMs in Bangladesh. They have broken new ground by building community-based and community-managed organizations for responding to the sexual health needs of MSMs. Both organizations have created “safe spaces” where MSMs (who are stigmatized and marginalized) have an opportunity to socialize and openly access a range of services. Strong outreach programmes have been implemented. In Bandhu, an innovative clinic for STI diagnosis and treatment has been established. Sahodaran has contributed strongly to national advocacy and networking around policy and technical issues related to STIs, HIV and sex between men.

Telephone information provision and counselling have also started. Both organizations are trying to extend services to the female partners of MSMs although this is not yet as successful.

The level of commitment, among MSMs, to the health and welfare of their peers, is exemplary. They have, to some extent, demonstrated that collective action and community-building contain the potential to deal with the problems of MSMs.

Source: UNAIDS, *Best Practices Digest* 2003, extracted from Naz Foundation International Newsletter, *Pukar*, July 2000.

Governments must protect their societies from the epidemic by openly acknowledging the problems that MSMs face. Silence around groups such as MSMs hampers, and even prevents, reduction of their vulnerability. MSMs are among the groups affected at an early stage of the epidemic. Interventions among MSMs must therefore be initiated early to reduce the risk of HIV infection among them. As MSMs face negative stereotyping and their sexual behaviour is deemed illegal, laws must be interpreted and implemented in a pragmatic manner to allow preventive and promotive health care to reach them in a non-threatening environment. It is important that Governments take into consideration the futility for HIV prevention of a tough legal approach that criminalizes MSMs, making them impossible to reach.

As in the case of sex workers and IDUs, tackling the problem of HIV/AIDS among MSMs requires an integrated approach. Such an approach would include raising their issues publicly, providing user-friendly services and involving the MSM community in implementing interventions.

(d) Mobile populations: women, men and children on the move

At no other time in history has there been so much movement from one place to another within countries and between countries. The number of people moving within the Asian and Pacific region, and beyond it, has soared in the past few decades. Mobile people include transport workers, the uniformed services, seafarers (see box III.6), migrant labourers, businessmen, traders, tourists and government employees. Many people also move involuntarily. They may be trafficked. Or they may move because of displacement by war, civil strife and natural disaster. People also move in attempts to escape destitution.

Skilled and semi-skilled workers from Kiribati, the Philippines, Sri Lanka and Tuvalu, for example, are highly mobile. Workers from Bangladesh, Bhutan, India and Nepal also travel back and forth between these countries. They are all vulnerable to acquiring HIV and spreading the infection.

Thailand serves as a hub for regional migration. It is estimated that Thailand has around 2.5 million migrant workers, mainly from Cambodia, the Lao People's Democratic Republic and Myanmar

Box III.6. Seafarers – South-East Asia and the Pacific

For centuries, seafarers have traversed the waters of Asia and the Pacific, as traders, fishermen, sailors or adventurers.

Estimates suggest that, along the coasts of South and South-East Asia, up to 13 per cent of maritime workers between southern Bangladesh and the Indonesian province of Irian Jaya are HIV-positive (Agence France-Presse 1999). Filipinos, who constitute nearly 20 per cent (or 500,000) of the world's seafarers, are especially susceptible. The wives of Filipino seafarers live in uncertainty as to whether their partners have acquired an STI, or HIV, while away. In the words of one wife, "I always remind him to please come home to me safe, but I have no way of knowing if he's been faithful to me". Not being able to persuade him to undergo a medical examination she notes, "So I just closed my eyes and prayed" (Sison 2001).

Surrounded by the vastness of the world's largest ocean, Pacific islanders have traditionally depended on the sea as a main source of livelihood. For example, some 10 per cent of young men from Kiribati and Tuvalu work as sailors (Crocombe 2001, p. 93). They could be away from home for up to 12 months at a time and are vulnerable to HIV infection.

The Minister of Health of Tuvalu expressed concern over this issue: "The incidence of HIV/AIDS is highest among our seafarers who have gone overseas to work on merchant boats and contract the killer virus abroad. Although our small economy has greatly benefited from the income earned and remitted back home by our seamen, it is through this particular group of our community that Tuvalu is exposed to the HIV/AIDS threat" (Seluka 2002).

Many young women who are unable to find employment engage in sex work, finding clients among foreign vessels visiting the capital, Tarawa (Keith-Reid and Tuqiri 2002).

(ESCAP 2003a), of whom only about 500,000 are documented. This raises concerns regarding the access that mobile populations have to health-care services.

Income disparity within countries is a significant factor in intracountry mobility. Intracountry income disparity entices workers to migrate to more affluent regions in search of employment.

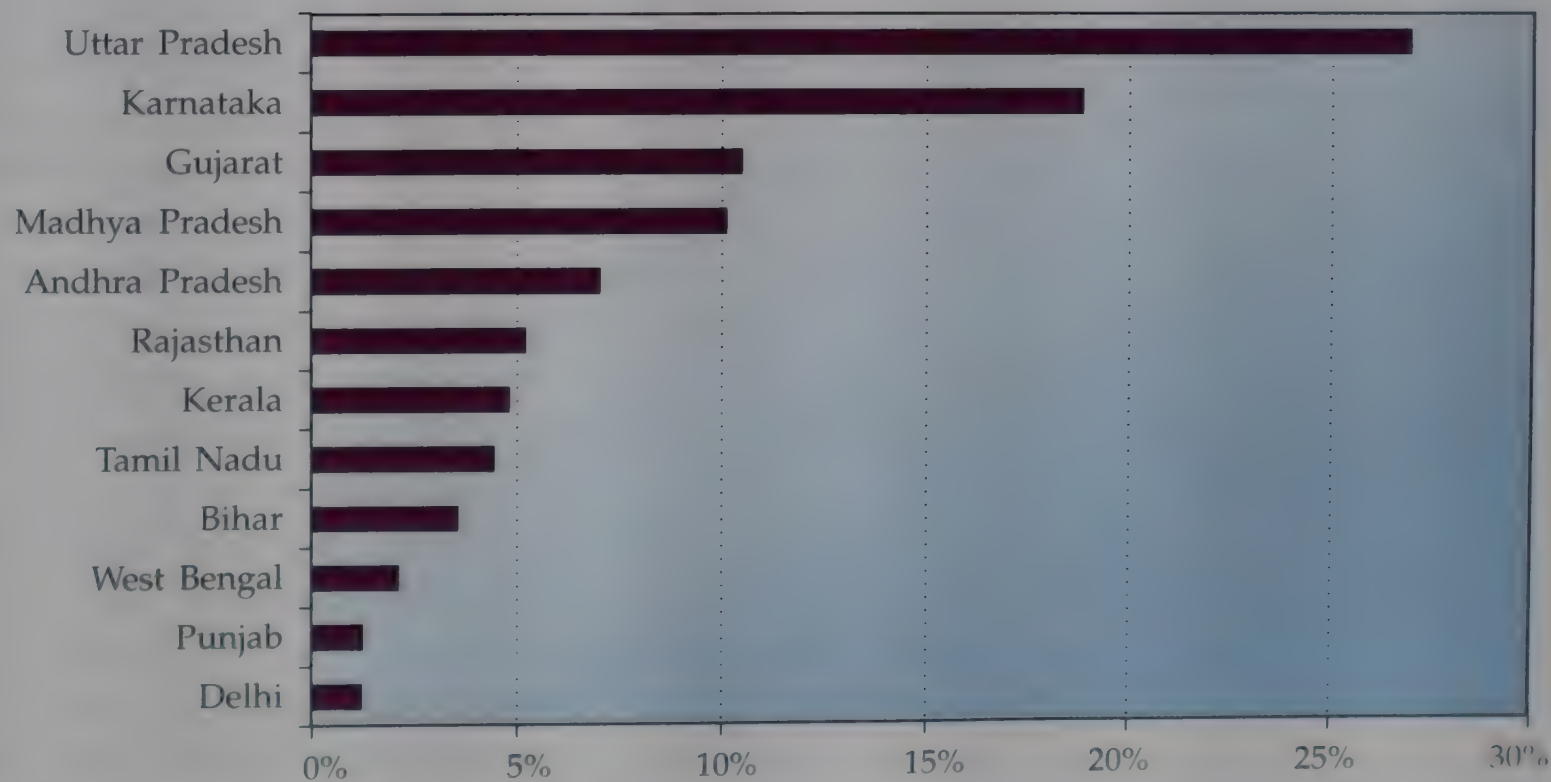
Estimates indicate that nearly 100 million Chinese have either temporarily or permanently moved from their homes (Compendium of Reports 2001). The industrialized state of Maharashtra, India, for example, attracts many migrants from other parts of the Indian subcontinent, particularly from states such as Uttar Pradesh and Madhya Pradesh that have lower per capita income levels (see figure III.4). Many of the migrants, especially young men, are likely to use the services of sex workers. With a prevalence rate

of over 1 per cent, migrants to Maharashtra may help to spread the virus to other parts of the country where prevalence rates are substantially lower. Significantly, the major sites of origin of these migrants (such as Bihar and Uttar Pradesh) have low prevalence rates. However, parts of the host site, Maharashtra, are high-prevalence sites. In many of the villages of Bihar and Uttar Pradesh, instances of HIV infection are coming to light. Those who have acquired HIV in these villages have been migrants to Maharashtra. This indicates that unless prevention measures are implemented, even in low-prevalence areas such as Uttar Pradesh and Bihar, a major outbreak cannot be averted.

Some countries are more affected by mobile populations than others. For example, there are some 7 million Filipinos, mostly women, working overseas, who constitute around 8 per cent of Philippine citizens. Nearly 28 per cent of HIV-positive Filipinos had previously worked overseas. Around 41 per cent of Bangladesh's PLWHAs had been migrant workers, while in Nepal's *Terai* (plains) region, 17 per cent of sex workers who had worked in India accounted for over 75 per cent of Nepal's PLWHAs. Ten per cent of migrants returning from Mumbai to Doti District in the far

Figure III.4. State-wise percentage of migrants to Maharashtra, India

(total number of migrants: 1.6 million)



Source: Unpublished data from UNAIDS South Asia Intercountry Team (New Delhi, 2001).

west region of Nepal were HIV-positive, compared with just 2 per cent among non-migrants (MAP 2001, pp. 23-24; UNAIDS 2002a, p. 114).

Mobile populations are vulnerable when away from their families and communities. Poverty, powerlessness and isolation exacerbate their vulnerability while they are away from the moorings of familiar support systems. Once in a foreign country, cultural differences, poor living conditions, difficulties in accessing information and limited education on the part of the migrants increase their vulnerability to HIV infection. Furthermore, discrimination that migrant workers often face at their destination increases their HIV vulnerability.

Framework for intervention

Knowledge gained in the past five years within this region points to the critical source-transit-host community linkages in the mobility of people. Furthermore, these linkages are part of a continuum. Thus, the framework for intervention among migrants involves specific interventions at points of destination and origin, as well as during transit. Counselling migrants about vulnerabilities

and risks at points of origin and destination, and during their transit, could help to shield these groups from the risk of HIV infection.

Box III.7. Success in dealing with mobile populations

Projects have been initiated in South and South-East Asia at points of origin, during transit and at points of destination. However, large-scale coverage had yet to be achieved. Examples of HIV-infection prevention include the mandatory Philippine programme on "Pre-Employment Orientation Seminars" for all Filipino workers departing for overseas employment, workers' survival kits designed for seafarers, domestic helpers and medical professionals, and the reintegration programme for returnee reintegration.

Source: UNDP, Report of the Workshop on the Brunei, Indonesia, Malaysia, Philippines, Singapore Cluster Country Consultation on Migrant Workers' HIV Vulnerability Reduction. Pre-departure, Post-arrival and Returnee Reintegration, September 2002. The post-arrival information kit produced by the Singapore Health Promotion Board is another example (UNDP, 2002).

The vulnerabilities of mobile groups can be addressed through the creation of enabling environments in specific locations and the adjustment of policies and regulations aimed at decreasing their vulnerabilities. One way of addressing their vulnerabilities is to change the way they travel, for example, by reducing the time that vehicles have to stop at border crossings or wait for cargo to be transported (UNDP and others n.d.). Another way is to increase their livelihood opportunities at points of origin, to pre-empt the

economic need to move. Yet another way to reduce HIV infection is to provide, at the points of destination, more outreach programmes, preventive health-care services and behaviour change programmes for mobile populations.

In certain cases, mobile population groups are linked with human trafficking, which in turn involves legal institutions. In practice, the involvement of legal institutions could make programme implementation to reduce vulnerabilities among these groups more difficult.

While HIV vulnerability reduction is everyone's responsibility, some host countries might assume that migrants, with their language barriers, and suspicion of government services and legal systems, are particularly difficult to reach with HIV/AIDS programmes. In this regard, neglect of migrant groups, however, could rebound on a host country. HIV is transmitted by people's behaviour, not who they are (Lee-Nah Hsu, email communication dated 24 February 2003). The virus does not discriminate between natives and foreign nationals. At risk are all those, particularly married women, who are not in a position to insist on safer sex.

(e) Uniformed personnel: HIV in the barracks

The vulnerability of uniformed personnel to HIV infection is highlighted in the Declaration of Commitment on HIV/AIDS (United Nations 2001b). The ministries of defence of some countries in sub-Saharan Africa have reported average HIV prevalence rates of 20 to 40 per cent among their armed services and rates as high as 50 to 60 per cent where HIV/AIDS has been present for longer than a decade. In the ESCAP region, there are troubling signs that HIV infection is an increasing problem among uniformed services. In Cambodia, the prevalence rate in the police force was found to be 4.7 per cent in 1999, about one third higher than the national adult HIV prevalence rate at the time (NCHADS 2000).

Several factors contribute to the HIV/AIDS risks that uniformed personnel face (see box III.8), not least the practice of posting personnel far from their families and communities for extended periods, thus increasing the opportunities and temptation

"HIV/AIDS is now the military's only enemy. It could devastate our plans for reform and reduce our capability. We are very worried."

*General Veng Bun Lay, Senior Health Official,
Ministry of Defence, Cambodia*

Box III.8. Uniformed personnel: high-risk behaviour

Factors that contribute to high-risk behaviour among uniformed personnel include the following that characterize this group:

- Youthfulness and predisposition to sexual activity.
- Mobility and physical absence from regular sex partners.
- Subjected to an ethos of risk-taking.
- Peer encouragement of high-risk behaviour, with lack of constraint on experimentation, including unsafe sex and substance abuse.
- Experience of periods of stress or boredom, from which unsafe sex is one easily available source of relief.
- Having more power, influence and money than the local, host community.

to engage in unsafe sex with multiple partners. Youth in the uniformed services and young new recruits are particularly vulnerable. They may not be aware of the risks involved in having multiple sex partners and engaging in casual sex. They may engage in higher-risk behaviour because they function in an environment in which risk-taking behaviour is the norm.

If a high level of HIV/AIDS prevails among uniformed personnel, it could undermine their overall level of preparedness, in turn increasing the risk to national security. As more officers and key personnel fall ill, combat readiness and defence capability can be expected to deteriorate.

Often, military bases or a strong military presence can act as a "magnet" for the provision of sex worker services. This can also heighten the risk of HIV infection among the local community. Additionally once demobilized, HIV-positive uniformed personnel could transmit the virus to partners in their local communities.

Box III. 9. Projects in the barracks yield results

Attempts to stop the spread of HIV in the army have been successful in Thailand. The Johns Hopkins University School of Hygiene and Public Health directs a programme that promotes safer sex among military recruits in Thailand. Among this group, the prevalence of HIV infection through 1993 was nearly 12 per cent, a rate hundreds of times that of United States Army volunteers. The Royal Thai Army flooded military recruits with AIDS prevention messages, an approach that dramatically reduced the rate of HIV infection among them. For 14 months, the intervention group received intensive training in safer sex practices. By the end of the period, only one recruit in the intervention group had become infected with HIV, compared with 13 seroconverters in the control cohort. Although about one third of the soldiers in the intervention cohort continued to visit sex workers, more than 95 per cent reported that they used a condom at each visit.

Measures to deal with the epidemic among uniformed service personnel have to be sustained. The interventions have to focus on behaviour change.

(f) Prisoners – quarantined behind prison walls?

Prisons provide an ideal environment for the transmission of the virus, as compelling evidence from the ESCAP region confirms. In 2001, 10 prisons in the Islamic Republic of Iran reported HIV infection among prisoners who injected drugs, with one site recording a staggering 63 per cent HIV prevalence rate. The overall prevalence rate among prisoners was 12 per cent in 2001 (MAP 2001, p. 3; UNAIDS/WHO 2002, p. 22). Approximately 10 per cent of prisoners in the Islamic Republic of Iran are believed to be drug injectors and over 95 per cent of them share needles.

In the Russian Federation, prisoners comprise about 15 per cent of registered HIV cases, with unsafe sex, tattooing and injecting drug use accounting for most HIV infections (Frost and Tchertkov 2002, pp. 7-8). High prevalence rates have also been detected in some Indonesian prisons, including a prison in Bali where 53 per cent of jailed IDUs were found to be HIV-positive in 2000 (UNAIDS 2002a, p. 97).

High-risk behaviours, such as injecting drug use and unprotected and sometimes coerced sex, expose prison inmates to the risk of HIV infection. Compounding the vulnerability of prisoners is their limited knowledge of HIV/AIDS. Few prisons offer inmates the means to protect themselves against the virus. Prison administrators frequently bar information about the virus. Preventive measures, such as condoms and liquid bleach for sterilizing needles and syringes, are seldom available.

**Box III.10. People behind bars
run interventions**

Among the projects directed at protecting inmates from HIV infection is one implemented in three prisons in Kathmandu. The main aim is to build awareness and knowledge of HIV/AIDS and STI transmission.

In coordination with the prison administration, a group of prisoners was identified to serve as peer educators. They received peer education training and became the focal point for HIV/AIDS/STI work inside the prisons. Peer educators were also trained in counselling. Education materials were distributed and a condom box was introduced, with the peer educators ensuring it stayed stocked. The net result is that condoms are now available in the prisons, which is expected to control infection. The counselling and education have empowered the prisoners to protect themselves and at the same time provide care and support to those prisoners who are identified as HIV-positive.

Source: P. Upadhyay, "Challenge in implementing HIV/AIDS/STD in the prisons in Kathmandu, Nepal," paper presented at the Twelfth World AIDS Conference, Geneva, 27 June – 3 July 1998.

Many of the prevailing social and cultural conditions that render women so vulnerable to HIV/AIDS are even more pronounced in prisons. Evidence from a prison in Manila suggests that many women prisoners had been vulnerable to HIV infection before their imprisonment. Generally poor and uninformed about the epidemic, they had engaged in unprotected sex with multiple partners (mostly in successive monogamous relationships). Once in prison, they faced the risk of sexual abuse from male inmates and prison wardens. At least 25 per cent of female inmates were infected with STIs (Simbulan and others 2001, pp. 599 and 605).

B. Young people – key to controlling the epidemic

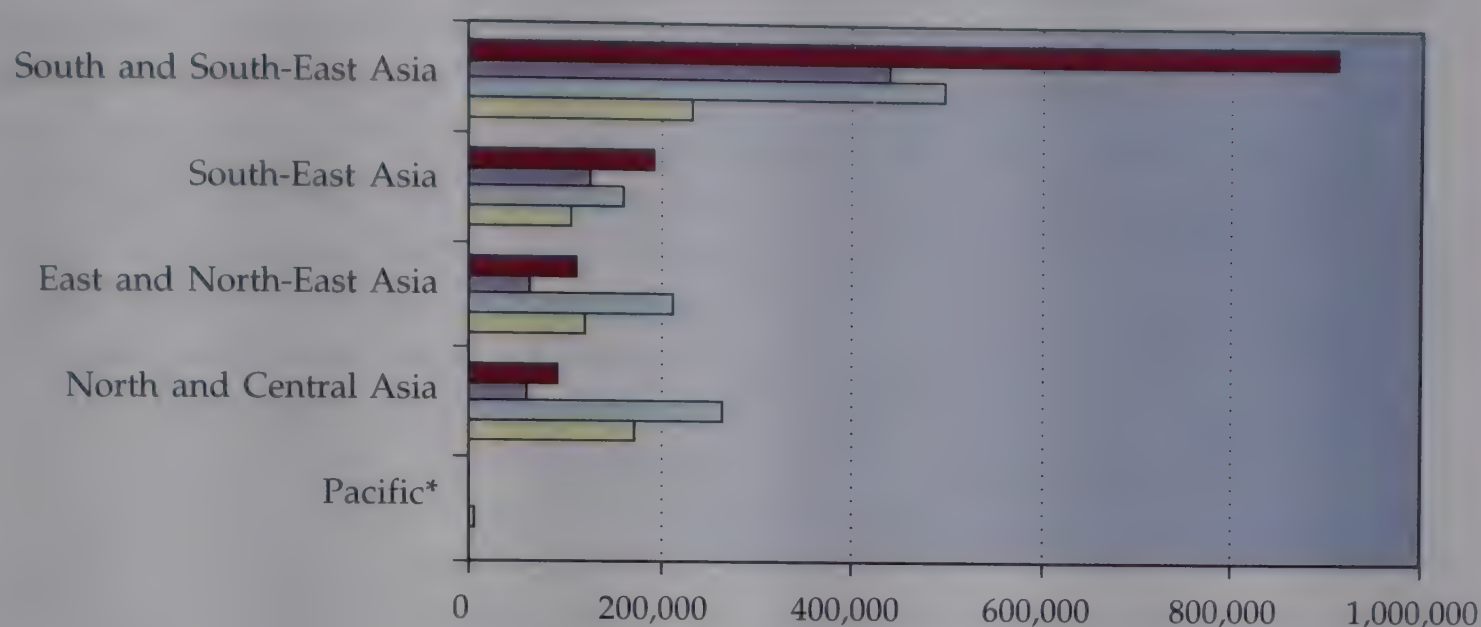
With over half of all new HIV infections occurring among people aged between 15 and 24 years, the Asian and Pacific region's 620 million young people are at great risk. Around the world, 11.8 million young people live with HIV/AIDS, most of them young women (UNICEF 2002, pp. 4-5). Especially vulnerable are young people in sex work, young IDUs, sexually abused youth, young combatants, young civilians caught up in armed conflict, street youth and orphaned youth.

Lacking access to youth-friendly information and services, and often subjected to disorienting social change, millions of young people in the ESCAP region are at risk of acquiring HIV. Millions are already affected by the epidemic. Yet vast numbers of young people remain unaware or ignorant concerning HIV/AIDS, with young women at a particular disadvantage. In most societies, sexual ignorance (revered as "innocence") among young women is encouraged. Many girls and young women have little control over how, when or where sex takes place (UNAIDS 2002a, p. 71).

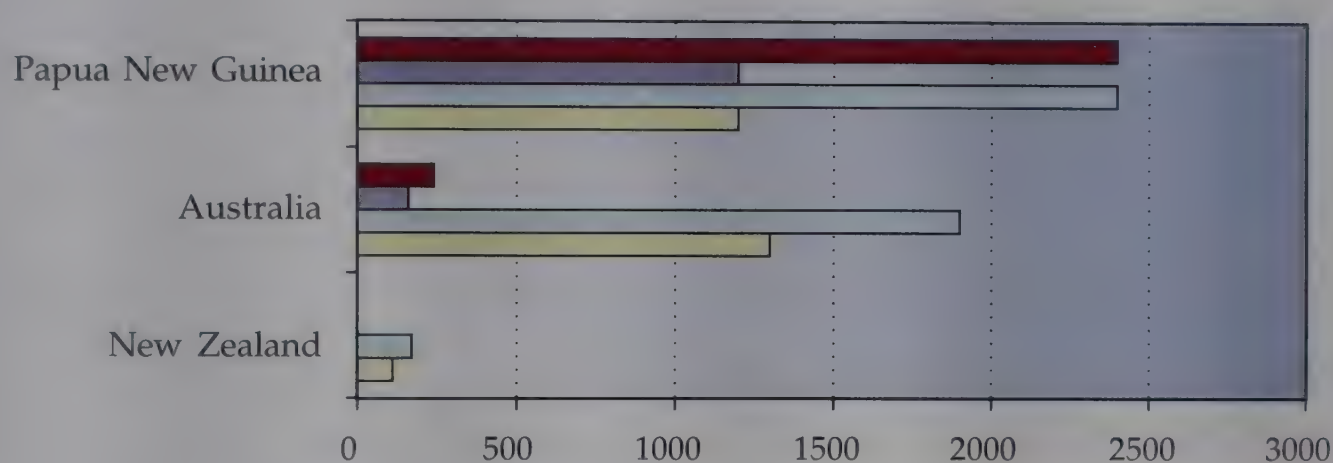
In Bangladesh, for example, only one in six female adolescents had heard of AIDS, and among them, just 22 per cent knew that AIDS could be avoided (Khan 2002, p. 130). UNICEF studies revealed that less than a quarter of women aged 15 to 19 in Azerbaijan and Uzbekistan, just over 25 per cent in Viet Nam and over 50 per cent in Cambodia were able to identify the main ways of protection against HIV infection (UNICEF 2002, p. 14).

In Cambodia, HIV prevalence rates among sex workers younger than 20 years of age are significantly higher than among those older than this age group (ESCAP 2003a). For a country with over 50 per cent of its population aged under 20 years, such as the Lao Peoples' Democratic Republic, the behaviour and health of young people are critical. There is similar cause for concern in the

Figure III.5. Estimated number of young people, aged 15 to 24, living with HIV/AIDS (end-2001)



Details for the Pacific subregion



Male low Male high Female low Female high

Source: UNICEF, UNAIDS and WHO. *Young People and HIV/AIDS: Opportunity in Crisis* (Geneva, 2002) table 1, pp. 38-44.

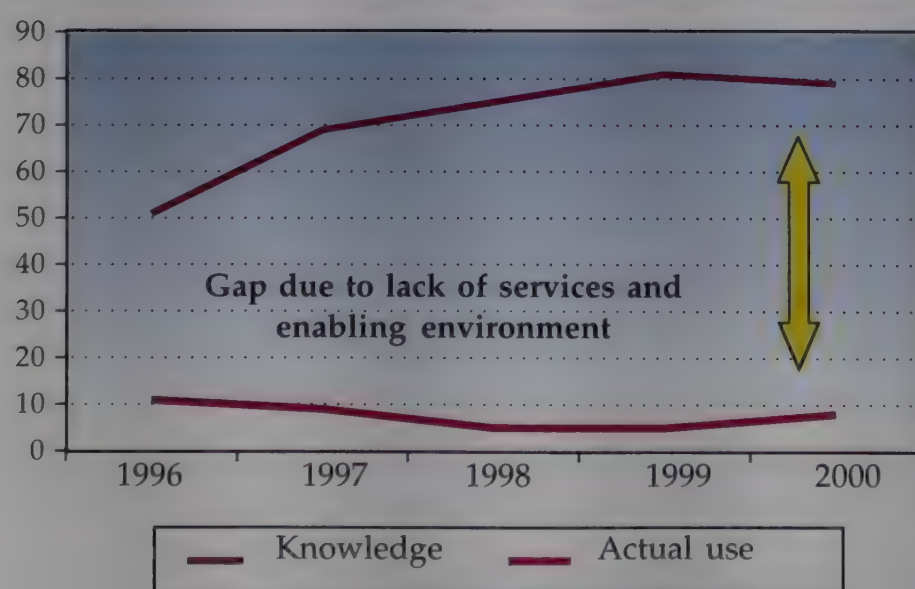
Note: The low estimates are the best-case scenario and the high estimates are the worst-case scenario.

case of countries with high HIV infection rates among young people, for example, the Philippines, with 35 per cent of all recorded HIV infections recorded among young people aged 29 years and younger (ESCAP 2003a). In Thailand, approximately 60 per cent of all new infections occur among young men and young women (ESCAP 2003a).

In many societies of the ESCAP region, young people's sexual attitudes and practices are changing, putting them at greater risk. For example, the current generation of young people in Japan appears to be having sexual intercourse at a younger age than previous generations. Over a third of Japanese women under the age of 25 report having sex with five or more partners in their lives, a substantially higher figure than for previous generations. Moreover, increased rates of chlamydia among females, gonorrhoea among males and a doubling in the number of induced teenage abortions suggest that a large number of young Japanese are having unprotected sex. In the two largest cities of Indonesia, Jakarta and Surabaya, evidence suggests that an increased number of high school students are engaging in premarital sex (MAP 2001, pp. 21-22; UNICEF as quoted in UNAIDS 2002a).

High levels of sexual activity among young people per se do not place them at risk of HIV, but unprotected sex can lead to HIV infection. Younger people are less likely than their married peers to be monogamous. They are also less likely to use condoms, thus increasing their chances of HIV infection. Moreover, the information and services that could prevent infection are often not available to, or accessible by, young people, and national strategies reflect scant regard for young people's needs and realities (UNICEF 2002, p. 5).

Figure III.6. Gap between young people's knowledge and their behaviour



Source: UNICEF, "Regional update of UNICEF action: HIV/AIDS, children and youth, mothers and babies in East Asia and the Pacific" (UNICEF, December 2002).

Providing young people with adequate information and knowledge is just a first step towards enabling them to protect themselves against HIV/AIDS. Knowledge alone does not automatically translate into safer behaviour. Data from Indonesia show that, despite an increase in knowledge among young people about condom use, the actual level of condom use remained very low and almost static, as shown by figure III.6. A lack of youth-friendly services and facilities are among the factors contributing to this gap between understanding and behaviour change.

On HIV/AIDS prevention, the numbers are also against the young people of the region. The large number of young people living in the Asian and Pacific region means that comprehensive coverage, even at low per capita cost, would entail huge expenditures. For example, reaching India's 240 million young people with HIV prevention programmes would require US\$ 240 million per year, even if interventions cost only US \$1 per capita per year. Such cost factors discourage adequate investment in comprehensive, youth-focused HIV/AIDS programmes, particularly in populous countries. Also hindering youth-focused prevention action is a widespread reluctance to acknowledge young people's sexuality and deal with it in a pragmatic manner. In many countries of the region, sex education has been introduced into the school curricula. However, there is still a great deal of resistance to providing young people with condoms and other sexual health-related services. In some countries, young people's access to HIV prevention services is conditional on their being married, i.e., the services are available only to married individuals and couples.

Declaration of Commitment on HIV/AIDS

"By 2005, ensure that at least 90 per cent, and by 2010 at least 95 per cent of young men and women aged between 15 and 24 have access to the information, education, including peer education and youth-specific HIV education, and services necessary to develop the life skills required to reduce their vulnerability to HIV infection, in full partnership with youth, parents, families, educators and health-care providers."

Source: United Nations, Declaration of Commitment on HIV/AIDS "Global Crisis-Global Action", June 2001.

C. Children, women and older persons

In addition to vulnerable groups, such as IDUs, sex workers and MSMs, as well as certain population groups such as young people, other groups who are also affected by the HIV/AIDS epidemic – owing to their status and roles in society – include children, women and older persons.

1. Children – innocent victims

The United Nations Convention on the Rights of the Child states that every child has the right to parental support (article 9), health (article 24), education (article 28) and protection against sexual exploitation and abuse (article 34). All countries in the ESCAP region have ratified the Convention. Yet as the HIV/AIDS pandemic spreads, those very rights are compromised. Especially vulnerable to

the epidemic are sexually abused and sexually exploited children, children forced to eke out a living on the streets and children orphaned when their guardians die of AIDS. In many cases, affected children, especially girls, must drop out of school to shoulder the responsibility of caring for ill adults in the family.

(a) HIV-positive children: mother-to-child transmission

HIV transmission from mother to child is responsible for over 90 per cent of infections among children under the age of 15. A mother may infect a child during pregnancy, at childbirth or through breastfeeding. The risk of transmission from mother to child varies between 15 and 30 per cent among infants who are not breastfed by HIV-infected mothers. Breastfeeding increases the risk of transmission by 10 to 15 per cent. However, effective and feasible interventions to reduce mother-to-child transmission are now available and could save the lives of 300,000 children each year in the developing world.

As the epidemic grows in the ESCAP region, mother-to-child transmission is of increasing concern. Mother-to-child transmission of HIV is a high priority in Asia today, owing to the rapid spread of HIV/AIDS, especially among women of reproductive age. In Thailand, where the Government launched broad-based efforts to halt the spread of HIV, less than 2 per cent of pregnant women were infected with HIV. In Myanmar, a study in early 1999 found that 2.6 per cent of pregnant women were HIV-positive, with as many as 10 to 13 per cent of women testing positive at some sites.

Providing ARV therapy during pregnancy could significantly reduce the possibility of mother-to-child transmission. However, ARV therapy is not yet widely available in most Asian and Pacific countries and territories, although it is relatively cheap and easily administered. Such treatment can reduce the chances of mother-to-child transmission of HIV by up to 50 per cent. Expanded access to this treatment should become a priority in the region. Indeed, Thailand, and to a lesser extent, India and Myanmar, have begun introducing such programmes on a wider scale.

(b) HIV/AIDS-affected children

Children affected by HIV/AIDS are subjected to a cycle of vulnerability.

As parents living with HIV/AIDS become ill, their children often have to take over many aspects of running a household – earning cash, producing food and providing other forms of care for the household. Young girls often bear the brunt of these duties. They might be withdrawn from school to care for sick parents or siblings or be required to take on additional income-generating work to support the family, forgoing an education. HIV/AIDS-affected children are also likely to encounter discriminatory behaviour. They may be excluded from school, denied health services and ostracized by other children (UNICEF 2002, pp. 23-24). All these jeopardize their security and prospects, further increasing the likelihood that they may be exposed to the risks of HIV infection.

2. Women, gender inequality and HIV/AIDS

The number of women living with HIV/AIDS is increasing worldwide. At the end of 2002, 19.2 million women worldwide were living with HIV/AIDS, accounting for 46 per cent of the 42 million adults living with HIV/AIDS.

Women currently comprise 13 per cent of HIV-positive adults in East Asia and the Pacific and 35 per cent in South and South-East Asia. However, in Cambodia, India, Japan, Papua New Guinea, Sri Lanka and Thailand, infection rates among women aged 15 to 24 are higher than among their male counterparts. In the ESCAP region, it is increasingly women who are in need of care. Compounding the problem is the tendency for families to expend less on women who fall ill than on men (ESCAP 2002c, p. 9).

(a) Women's Vulnerability

Physiologically, women (especially young women) are more vulnerable to HIV infection than men, while their generally subordinate social and economic status aggravates their overall vulnerability. Lack of employment opportunities, poor access to education, women's low economic status and prevailing gender-discriminatory norms and cultural practices compound the situation (UNAIDS 2002a, p. 65). Gender inequities in access to health care curtail women's ability to access preventive, promotive and curative health-care services and ARV support.

Overall in the ESCAP region, women account for a smaller percentage of the total number of people living with HIV/AIDS. However, that ratio appears to be narrowing in some places, including Thailand, i.e., more women are being infected.

Table III.1. Characteristics of the HIV/AIDS epidemic in selected countries/areas of the ESCAP region

Country/area	Adult	Youth	Country/area	Adult	Youth
	Women as percentage of adults living with HIV/AIDS	HIV prevalence rate among males 15-24 relative to females 15-24 years		Women as percentage of adults living with HIV/AIDS	HIV prevalence rate among males 15-24 relative to females 15-24 years
Japan	55	0.3	Iran (Islamic Republic of)	25	3.0
Cambodia	46	0.4	Singapore	25	1.0
Thailand	34	0.7	Republic of Korea	24	2.0
Sri Lanka	30	0.7	Bangladesh	24	1.0
Fiji	<30	na	Indonesia	23	1.0
Viet Nam	27	2.0	Pakistan	21	1.3
Philippines	27	1.0	Azerbaijan	20	4.0
Malaysia	27	6.0	Georgia	20	5.0
Lao People's Democratic Republic	27	1.5	Armenia	20	3.6
Russian Federation	26	3.0	Kazakhstan	20	4.5
China	26	1.8	Uzbekistan	20	na
Papua New Guinea	26	0.8	Kyrgyzstan	20	na
Hong Kong, China	25	na	New Zealand	15	4.0
			Australia	7	9.0

Sources: UNAIDS, *Report on the global HIV/AIDS epidemic*, (Geneva, 2002) and WHO, *HIV/AIDS in Asia and the Pacific Region* (New Delhi and Manila, 2001).

Note: na = not available.

(b) Factors contributing to women's vulnerability

In societies where misconceptions about masculinity prevail, men are encouraged to display their sexual prowess through having multiple sex partners and by indulging in alcohol and other substances that often lead to unprotected sex and violence. Young women and girls are particularly susceptible to rape and sexual coercion – they are widely thought to be free of the virus. In many countries in Asia, such as Sri Lanka, Nepal and India (Jordan 2000), the mistaken belief that having sex with a virgin can protect individual men from acquiring HIV/AIDS increases the vulnerability of girls to the virus (ECPAT International n.d.).

A host of other factors converge to render women especially vulnerable to HIV/AIDS (Gupta 2000, pp. 2-3). A "culture of silence" surrounding sex in many societies demands that "good women" remain ignorant about sex and passive, even subservient to men, in sexual interactions. This robs women of the right to control their bodies and their sexuality.

The same "culture of silence" stigmatizes women seeking treatment for STIs. The expectation in many societies that women will remain sexually innocent and inexperienced until marriage, holds them back from actively seeking information on HIV/AIDS, for fear of being perceived as inappropriately forward on sexual matters.

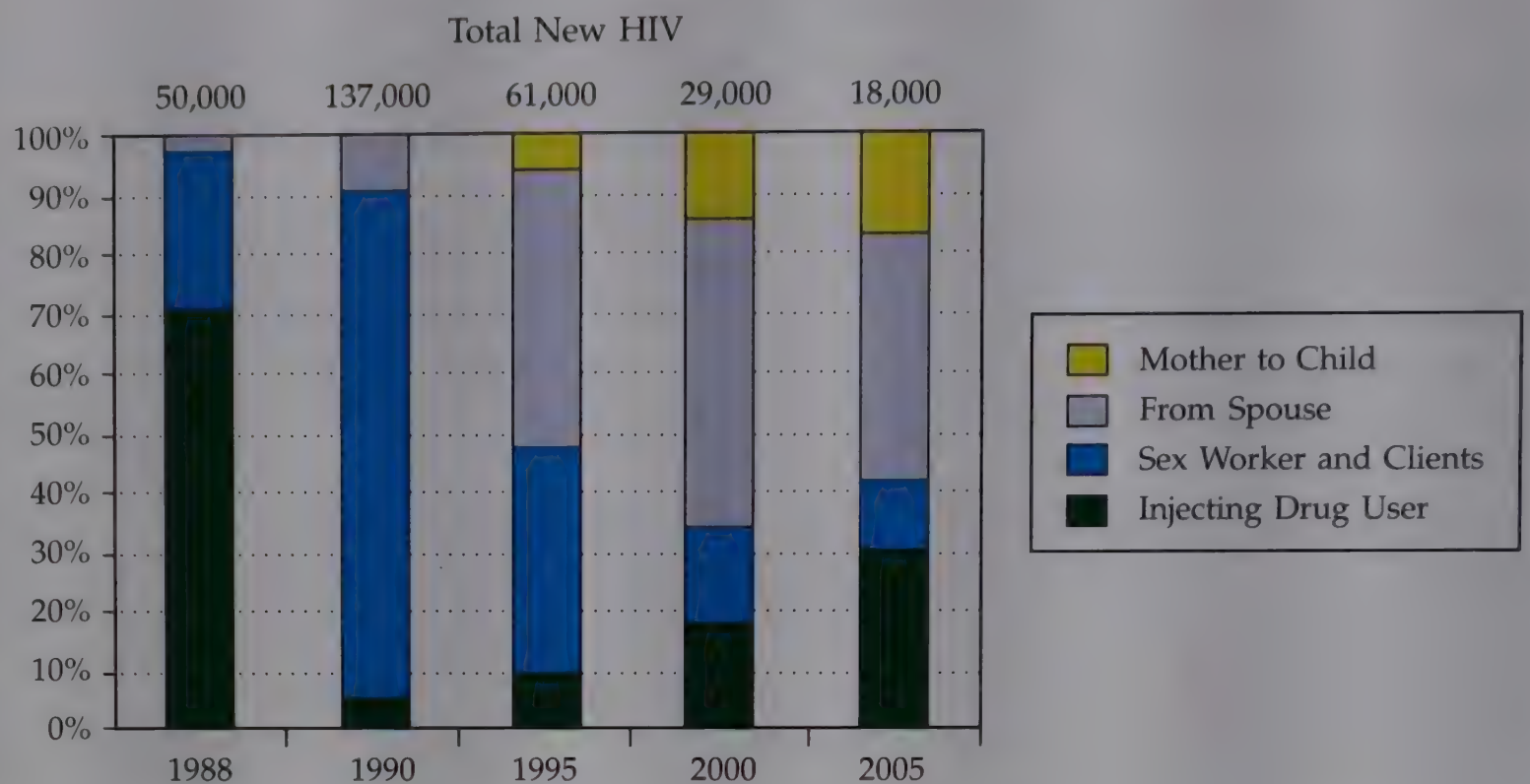
The use of barrier methods of birth control can be highly problematic in cultures that elevate the bearing of children as a feminine ideal and duty. Sexual abuse of women is a reality in most societies of the region. These factors, as well as women's economic dependency, increase women's vulnerability.

Low economic and social status restricts women's ability to discuss issues of fidelity and insist on condom use. Furthermore, many women in the region do not have open to them the choice to negotiate for safer sex, to refuse sex and/or to leave abusive and risky relationships. One study in Viet Nam found that only 35 per cent of women felt able to refuse their husbands sex (UNAIDS 2002a, p. 65). A study of low-income women in long-term relationships in Mumbai, India, illustrates how economic dependency mars women's ability to control their bodies (Gupta 2000). In addition to believing they held too little economic leverage to alter their husbands' behaviour, the women believed that the economic disadvantages of leaving their relationships far outweighed the health risks of staying in those relationships.

Given such circumstances, it is not surprising that a significant proportion of women living with HIV/AIDS in the ESCAP region appear to have acquired the virus within monogamous relationships. A study in India showed, for example, that 90 per cent of HIV-infected women were married, monogamous and had had only one sex partner in their lives, which strongly indicates that their husbands had transmitted the virus to them (Gangakhadkar and others, 1997).

In Cambodia, surveillance data for 2002 indicate that over 40 per cent of all new infections were transmitted from husbands to spouses (ESCAP 2003a). In Thailand, an estimated 42 per cent of

Figure III.7. Thailand: changing routes of transmission



Source: Tim Brown, "Dynamics of Asian HIV epidemics", paper presented at the Sixth International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 6 October 2001.

new infections in 2000 were among women who had been infected by their husbands or regular sex partners, as figure III.7 illustrates. In 1990, about 10 per cent of HIV transmission had occurred from husbands to wives; a decade later, that proportion had swollen to 50 per cent.

3. Older persons: overlooked minority

The effect of HIV/AIDS on older persons is largely overlooked. Many older persons themselves do not believe that they are at risk of acquiring HIV/AIDS. This belief is widely shared. However, the risk is hardly negligible. In Thailand, some 5 per cent of PLWHAs were older than 60 in 2000. The United States, with about 10 per cent of AIDS cases among people aged over 50, provides an indication of one possible scenario of vulnerability related to an older age (Wooten-Bielski 1999).

Older persons are as likely as the rest of society to have misconceptions about HIV/AIDS. A study in Thailand, for example, found that a significant proportion of older persons believed they

could acquire HIV through casual contact with PLWHAs (Im-em and others 2002, p. 260). With such misconceptions, many older persons are reluctant to provide care when it is most needed.

As Asian societies progressively age and the epidemic evolves, there will be an increasing need to recognize and respond to the requirements of older persons. Currently, most prevention programmes are not geared to the realities and concerns of older people.

The absence of programmes that address older persons heightens this group's vulnerability to HIV. It leaves them ill equipped to guide younger people on how to protect themselves from HIV infection. It also means that older persons may not be as well placed to serve as caregivers as the situation might require of them.

In view of the important role that older persons play in intergenerational arrangements for care and support, they will be central to efforts to cope with a growing epidemic. As more and more young people fall ill, increasingly parents will find themselves having to provide physical care and emotional, financial and material support.

Loss of remittances and other financial flows, shortages of food and clothing, the high cost of medical fees during illness, loss of economic support and diminished livelihood opportunities add up to place a considerable burden on older persons. In addition, they are likely to have to deal with the stigma associated with the disease. Few Governments have introduced economic subsidies and support for older persons to care for sick or orphaned children and grandchildren.

Burying adult children, raising orphaned grandchildren, making ends meet and enduring emotional stress are the bitter, tragic fate of older persons in parts of the region whose stories have not yet come to light because household-level impact is not yet visible at the macro level.

D. For whom the bell tolls

A growing epidemic will slow – and eventually can even reverse – improvements in life expectancy.

Adult death rates could be dramatically affected in the short term. When the adult HIV prevalence rate reaches 4 per cent, HIV/AIDS could account for one third of all adult deaths (ESCAP 2002c; UNAIDS 1998). Badly affected areas in several countries of the region, including some parts of northern Thailand, south-central China and India (ESCAP 2002c), could soon experience HIV prevalence rates of 4 per cent and higher unless urgent and concerted prevention efforts are undertaken. Calculations made for four countries (Cambodia, India, Myanmar and Thailand) show that they can expect 2.2 million additional deaths as a result of HIV/AIDS in the period 2000-2005 (United Nations 2001a).

Based on data for 45 countries for which such projections are available, a 1 per cent increase in the national adult HIV prevalence rate would reduce life expectancy by approximately one year (United Nations 2001a; ESCAP 2002c). In severely affected places, the impact could be catastrophic. It is instructive to note that life expectancy in the period 2000-2005 in Botswana and South Africa (2 of the most developed countries in sub-Saharan Africa) is projected to be 36.1 years and 47 years respectively (United Nations 2001a). Just a decade earlier, in 1990-1995, life expectancy in both countries had stood at around 60 years. While the epidemic has not yet reached a comparable scale in Asia and the Pacific, already in Cambodia life expectancy in the period 2010-2015 is projected to be 59.2 years, 5 years less than it would have been without HIV/AIDS (United Nations 2001a).

The spectacular progress in child survival achieved in the ESCAP region is also under threat. As the HIV/AIDS pandemic matures, mother-to-child transmission of HIV typically causes infant and under-5 mortality rates to rise. Some projections for Thailand, for example, warn that child mortality in 2010 could be 30 per cent higher as a result of AIDS (Rhucharoenpornpanich and Chamratrithirong 2001; ESCAP 2002c).

E. Conclusion

Everyone is vulnerable. Every country therefore needs to launch a comprehensive programme of HIV/AIDS prevention covering all population groups and involving all sectors of society. The approach should also be a long-term one because effective prevention and behaviour change take time.

Although everyone is vulnerable, vulnerabilities differ across groups. Hence, within a national programme, it may be necessary to prioritize interventions for groups that are most likely to be affected first and affected most in the early stage of the epidemic. Such groups include sex workers, IDUs, MSMs and migrant workers. These vulnerable groups would have to be targeted first to arrest the spread of the epidemic to the wider population. Targeting them early on, when their numbers are relatively small, would be more effective in stopping the spread of HIV/AIDS. At the same time, with small initial numbers, intervention costs could be minimized. These groups deserve special attention also because they tend to be the first to acquire the virus and they suffer the consequences of negative stereotyping since their behaviour is often illegal.

To achieve the maximum impact in dealing with the epidemic in low-prevalence countries, it is imperative to complement prevention efforts focused on especially vulnerable groups with efforts to reach the wider population. Young people, the largest vulnerable population group, have to be targeted early. Not only is their sexual behaviour pattern easy to influence if they are targeted in time, but they are also easily accessible in large numbers through existing institutions, such as schools and colleges, and programmes, such as those of youth organizations and clubs.

The national programmes need to counter negative stereotyping of vulnerable groups and discriminatory behaviour towards them. If this is not done, the consequences might be deadly for the region: numerous, untold preventable infections, rejection of PLWHAs by families and support networks and death inflicted both by the virus and by other members of the community.

Silence also obstructs the development of interventions that are fundamental to addressing the vulnerability of special groups, such as IDUs and MSMs, to HIV/AIDS. Protection of the societies of this region from the epidemic can occur through public acknowledgement of the existence of the problems of HIV/AIDS and of problems confronting special groups such as IDUs, MSMs and sex workers, encouragement of public debate on the issues and a concentration of efforts to address those issues.

A blanket programme approach to tackling HIV/AIDS may not work. This means that a comprehensive national response should have built into it group-specific interventions that address the

various needs of diverse vulnerable groups. Thus, for example, while clean needles and detoxification services may have to be provided for IDUs, interventions such as sex education and awareness generation in a user-friendly environment targeting young people need to be separately mounted. It is also worth bearing in mind that there can be no short cuts and quick fixes in saving lives through HIV prevention. There is no single approach that will work with all vulnerable groups.

The cost of intervention should not justify fragmenting a national response. Resources must be mobilized to provide long-term critical programme coverage of young people, who number some 620 million in Asian and Pacific countries and territories. Resources should also be mobilized for an urgent response in the case of groups such as sex workers, IDUs and MSMs, prioritized according to their vulnerability relative to particular stages of the epidemic.

At the same time, the creation of a conducive policy milieu is crucial to influencing how laws are interpreted and implemented and the extent to which they mar or facilitate prevention interventions that can indeed reach vulnerable groups (such as health-care services and the supply of condoms and clean needles and syringes). Such efforts are needed to enable vulnerable groups to access the services more easily.¹ A prevention approach is likely to yield more effective results in arresting the epidemic than a tough legal approach, which may lead to criminalization of vulnerable groups, forcing them into hiding.

Mobile populations, including migrant workers and uniformed personnel, are vulnerable to the virus. It would be essential to design interventions that address the vulnerability of mobile populations at the points of origin, in transit and at points of destination. The intervention at the point of origin should address push factors to reduce vulnerability. These push factors include impulses that induce mobile populations to move out of their community (such as poverty and lack of access to resources), along with counselling to raise awareness of diverse issues, including the risks of

¹ In Thailand, for example, although sex work is illegal, the distribution of condoms in all brothels in the country has been sanctioned by the State.

A shift in thinking is required to recognize people in need as *"individuals with rights, with valid claims, rather than objects of care, benevolence and charity"*. Such a shift will *"require agreement on some sharing of responsibilities for solving global problems among governments, international bodies, the business sector and civil society"*.

Mary Robinson, former President of the Republic of Ireland and
Director of the Ethical Globalization Initiative.

acquiring the virus while in transit and at points of destination. In transit and at destination points, access to health services (such as STI treatment) must be made available, irrespective of the origin of the service users. This is not only good economics but also good politics.

The time has come for leaders and decision makers of the Asian and Pacific region to initiate interventions that may seem politically controversial and socially sensitive, but which have the greatest impact on the epidemic. Political and social sensitivity should not deter bold action of historic significance.

It is important for political and government leaders to set aside the misconception that working with sex workers, MSMs and IDUs would reflect badly on government and on the good name of countries. For example, initiating sex education in schools and widespread distribution of condoms may be misconstrued as promoting promiscuous behaviour among young people and encouraging permissiveness in society. Yet far-sighted decisions need to be taken for early prevention of the epidemic. History reminds us that leaders who had taken bold decisions subsequently earned widespread national support and international acclaim by halting the spread of the disease in their respective countries.²

The final challenge to the countries and territories of the ESCAP region is to accept that some of the basic causes of the epidemic lie in inadequate progress in development. To address

² Brazil, Cambodia, Senegal Thailand and Uganda are examples in point.

factors in this, the Governments of the region would have to complete the unfinished agenda of ensuring food, education and health for all and of reducing poverty in the region.³ Countries that have succeeded in arresting the spread of the virus are those that have conquered hunger, disease and illiteracy and reduced poverty. Leaders must act now while there is still time. The virus is testing us.

³ These are millennium development goals adopted by the United Nations General Assembly in 2000 (Bjorkman 2002).

CHAPTER IV

SAVING OUR FUTURE

"To know what is right and not to do it is the worst cowardice."

Confucious

This chapter examines the potential impact of the HIV/AIDS epidemic in Asia and the Pacific in the absence of an expanded and comprehensive response. What implications does a burgeoning epidemic hold for the security and livelihoods of households and communities? What toll might it take on incomes, savings, human resources, investments and productivity? How might it affect efforts to provide essential, quality services to society and extend the socio-economic gains of recent decades? All indications are that the likely costs of complacency and inaction will be prohibitively steep – and will far outstrip the costs of acting now to save the future.

A. The economic cost of the HIV/AIDS pandemic

The social costs of the HIV/AIDS pandemic have been discussed in chapter III. It has proved difficult to disaggregate from other factors the precise impact of HIV/AIDS at the macroeconomic level. Nevertheless, available evidence suggests that as HIV prevalence rates rise to high levels, both national income and its rate of growth tend to shrink. The savings rates of affected households are often drastically reduced with significant economic implications if an epidemic reaches serious proportions. The labour force and customer base of businesses could be severely affected, as could agricultural production. Government revenue might suffer and investment levels could drop (Bloom and others 2001, 2002; Bonnel 2000; Robalino and others 2002).

Globally, HIV/AIDS is estimated to reverse annual economic growth by as many as 2 percentage points in the worst-affected countries (Compendium of Reports 2001). According to World Bank estimates, a prevalence rate of 8 per cent could reduce gross domestic product (GDP) by 0.4 per cent, compared with a no-AIDS scenario.

Nationally-focused studies have forecast that, by 2015, the economies of Botswana and Swaziland would grow by 2.5 and 1.1 percentage points less, respectively, than in the absence of AIDS. Another study has estimated that national HIV prevalence rates of 20 per cent could reduce annual GDP growth by an average 2.6 percentage points (ESCAP 2002c). Applied to ESCAP countries such as Indonesia, Malaysia or Thailand, such scenarios imply losses of billions of dollars.

A simulation model for the Russian Federation has predicted that a national adult HIV prevalence rate of 5 per cent by 2007 (a fivefold increase over the rate at the end of 2001) could leave the country's GDP 10 per cent smaller than it would have been in the absence of an epidemic (ESCAP 2002c, p. 7). By 2020, annual GDP growth could be a full percentage point lower.

1. Impact on the household

It is at the subnational level that the impact of HIV/AIDS on economic output is likely to be harshest, especially in a region where more than 800 million people live on less than one US\$ 1 a day.

As more and more PLWHAs succumb to AIDS-related illnesses, the financial and material burden of care tends to shift away from hospitals towards their families and friends, who provide home- and community-based care. The impact of the disease on household welfare can be potentially devastating. Recurrent and protracted bouts of illness place an additional burden on already poor households and can lead to further impoverishment for families already trapped near or below the poverty line. The two major causes are a drastic increase in health-care expenditures (which depletes private savings) coupled with a severe reduction in the incomes of both patients and their caregivers (ESCAP 2002c).

Medical expenses for an AIDS patient are typically higher than for non-AIDS patients. In Thailand's Chiang Mai province, HIV/AIDS-affected families reported spending an average of US\$ 1,000 in direct medical care costs during the last year of life of a person living with AIDS, or the equivalent of one half the average annual household income (Pitayanon and others 1997). In Cambodia, expenditure was found to equal several times an extended family's annual income. In rural parts of Cambodia, the high cost of medicine and the rural credit system combined to make HIV/AIDS a significant cause of landlessness (ESCAP 2002c).

AIDS deaths are associated with a larger decrease in household consumption than are deaths from other causes (ESCAP 2002c). In the Chiang Mai study, one third of the households interviewed reported an average decrease in household income of 48 per cent. Households tended to respond by delving into their savings, borrowing money from friends and relatives, taking on high-interest debt from moneylenders, augmenting wage incomes (sometimes by dispatching children into the labour market), diverting expenditures from other essential areas, disposing of non-productive assets (a reversible strategy) and eventually disposing of productive assets such as land, animals and equipment (a non-reversible strategy which can lead to pauperization). Unless avoided or, at the very least, tempered, such processes can unleash a destructive cycle of impoverishment that can fracture local social structures. The Chiang Mai study found that 60 per cent of the households with an AIDS death had used up their savings, 44 per cent had sold land, 42 per cent had reduced their food consumption, 28 per cent had sold a vehicle and 11 per cent had borrowed money (US\$ 1,700 on average, which represents about one quarter of Thailand's 1995 GDP per capita) (Pitayanon and others 1997; ESCAP 2002c). The poorer the household, the greater the proportion of available expenditure absorbed by HIV/AIDS, and the more severe the relative economic impact.

HIV/AIDS disproportionately strikes young adults at the peak of their productivity and earning power. The reduced working capacity of a main income earner with AIDS drastically curtails household income. The Chiang Mai study also found that the foregone lifetime income of a deceased worker was about 30 per cent higher when the person had died of AIDS (between US\$ 28,592 and US\$ 47,550, compared with US\$ 22,020 to US\$ 28,241 in the case of workers who had died of non-HIV/AIDS-related causes). The main reason for the difference is that those who died from AIDS were generally younger and the number of work-years lost was therefore higher (ESCAP 2002c).

2. Beyond the household – the cost to enterprises

The impact of HIV/AIDS ripples across the wider economy, too, initially and most obviously at the local level. HIV/AIDS cuts the incomes of affected households, thereby reducing their spending and lowering the overall demand for goods and services (as well as tilting demand away from certain goods and services towards others). This can profoundly disrupt local economies, with some local enterprises seeing sales and profits drop off, and local workers seeing job opportunities grow scarcer.

In a rampant epidemic, such consequences can accumulate and act as a drag on economic growth at the subnational and even national levels. One of the more significant effects is on the labour supply. Calculations for Thailand show that had the epidemic's growth not been arrested, the country's working age population could have been about 10 million smaller by 2015 (Bloom and others 2001). This could have reduced the average GDP per capita growth rate between 1990 and 2015 by about 0.65 percentage points, leaving GDP per capita in 2015 US \$ 1,272 lower than the projected US\$ 8,500. Losing skilled and experienced workers through HIV/AIDS compromises labour productivity and threatens the region's prosperity.

Workers in the informal sector are particularly vulnerable to the consequences of HIV/AIDS, as the International Labour Organization (ILO) has shown in the case of Africa. These workers usually lack workplace medical benefits and other forms of social protection, while their job security is fragile at best. In such circumstances, illness can be disastrous, as a study of female traders in Owino market in Uganda has shown. When women fell ill or had to care for their kin, their perishable stock went to waste and financial reserves were quickly depleted. This left the women unable to replace their stocks, forcing them to forfeit their stalls and watch their enterprises collapse. The same study noted that many of the women who fell victim to this chain of events were forced to sell or barter sexual services in an effort to regain some kind of financial security. That recourse, in turn, made them more vulnerable to HIV infection (cited in ILO 1995).

3. Every sector is vulnerable, especially education and health

The education and health sectors are particularly vulnerable to the consequences of HIV/AIDS.

(a) Health

A healthy population is vital for economic growth and development. Healthy societies are more likely to be wealthy societies (Compendium of Reports 2001). The HIV/AIDS epidemic threatens this important linkage. Furthermore, it adds to the pressures placed on public health sectors, which are already under considerable strain in some countries.

Research conducted in Papua New Guinea has shown that even when HIV/AIDS affected just 0.2 per cent of the population, related illnesses accounted for 5 per cent of the patients occupying beds in Port Moresby General Hospital. As AIDS patients grow in number, the demand for hospital beds increases. In Papua New Guinea, the Government expects that AIDS patients will occupy 70 per cent of all hospital beds by 2010. In Africa, where rates are much higher, some figures suggest that up to half of all hospital resources are absorbed by HIV/AIDS patients (CIE 2002).

A shortage of beds means more patients are admitted at later stages of illness, reducing their chances of recovery (UNAIDS 2002a p. 51). In the provincial hospital of Chiang Mai, northern Thailand, about half the beds have been occupied by PLWHAs in recent years. In 2002, Cambodia's health-care system had no additional capacity to provide appropriate treatment for the estimated 12,000 PLWHAs in need of care and support (communication received from the Secretary-General, National AIDS Authority, Cambodia, 22 February 2003).

There are other points of stress in the health system. Diagnosis and examination of patients are likely to require up to 30 per cent more time as more people, with more complex illnesses, turn to health services for help in the midst of a growing epidemic. Counselling demands increase, as does expenditure on testing procedures, drugs and other supplies, by up to 30 to 40 per cent in some cases. Most countries are ill prepared for such eventualities. The United Nations (1996) has estimated that the average annual health-care cost for a person living with HIV/AIDS in the Pacific islands was about US\$ 5,000 in 1996, compared with the average US\$ 20 to US\$ 30 per person that Pacific island Governments were spending on health care at the time. Even a moderate HIV/AIDS epidemic would therefore impose a huge burden on government budgets in these countries and on household health-care spending.

The HIV/AIDS epidemic is also associated with an increase in active tuberculosis (TB) cases, among both HIV-positive and HIV-negative populations. TB carriers who are also infected with HIV face a 30- to 50-fold increase in their risk of developing active TB (WHO 2001b, p. 78). The World Bank has estimated that 25 per cent of the HIV-negative persons dying of TB in the coming years worldwide would not have become infected with the bacillus in the absence of the HIV/AIDS pandemic. Most countries of the Asian

and Pacific region can expect an increase in HIV-related TB cases of 5 to 10 per cent (ESCAP 2002c). In Cambodia and Thailand, the number of TB cases could double.

The cost of basic palliative care and treatment of opportunistic infections – not ARV treatment – can place a heavy burden on health budgets and systems, especially in countries with low or dwindling per capita expenditures on health. The World Bank has estimated that in many developing countries, one year of basic medical treatment can amount to 2 to 3 times the per capita GDP. In Thailand, one estimate has put the annual cost of basic medical care for each person living with HIV/AIDS at approximately US\$ 1,000 per person or about 25 times the Government's per capita health expenditures (Farooq 2000, p. 10).

Making free ARV treatments widely available to PLWHAs would require a public subsidy amounting to six times Thailand's entire AIDS budget. Furthermore, PLWHAs would still have to pay around US\$ 500 a year for the related health care required, a sum most would not be able to afford (UNAIDS 2000, p. 96). The lower-priced generic three-drug combination manufactured in India could lower costs somewhat, provided that it could be made widely available.

The epidemic poses other problems for the health sector. Health workers are vulnerable to HIV, which they could acquire through needlestick injuries, and to other opportunistic infections. Increased workloads and stress levels and declining morale among health workers often accompany a growing HIV/AIDS epidemic and can encourage staff to move abroad or abandon the public sector or even the health profession itself (UNAIDS 2002, p. 51). As the epidemic expands, more health workers would themselves succumb to AIDS-related illnesses. Such losses would lead to further deterioration of health services, while the demand for health services rises.

(b) Education

Education is a fundamental aspect of human capital development and of overall growth in labour productivity, national income and economic prosperity. HIV/AIDS now threatens to unravel the significant improvements made over the last several decades in the education systems of countries in the ESCAP region.

In a severe HIV/AIDS epidemic scenario, a decline in school enrolment is one of the effects. Children are removed from school to care for parents and family members. School fees and other expenses become unaffordable. AIDS-related infertility and a decline in the birth rate mean fewer children are born. More children are themselves infected and do not survive their schooling years (World Bank 2000; UNAIDS 2002a, p. 52).

In the Central African Republic and Swaziland, for example, school enrolment reportedly fell between 20 to 36 per cent owing to AIDS and orphanhood, with girls being most affected (UNAIDS 2002a).

AIDS may lead to fewer qualified teachers and administrators, weakening the quality of education. In Manicaland, Zimbabwe, 19 per cent of male teachers and almost 29 per cent of female teachers were found to be infected with HIV (UNAIDS 2002a).

The debilitating effects could be especially severe in rural areas, where schools typically rely on a small number of teachers and school staff. Losing just one or two could jeopardize a school. Training new teachers and hiring substitute teachers in substantial numbers would strain education budgets and threaten to crowd out investment in in-service training, teaching materials and education infrastructure and maintenance. Unless adequate prevention and impact mitigation measures are put in place, countries in the region that have reached high standards of literacy and education are likely to see a deterioration in terms of the quality and loss of skilled personnel if the HIV/AIDS epidemic is allowed to spread unchecked. Efforts to provide quality education for all could stall in the face of HIV/AIDS.

4. Rural and agricultural sectors

The effects of an expanding epidemic can be pronounced in the agricultural sector, particularly in countries, such as China, India and Indonesia, where more than 50 per cent of the labour force is employed in this sector (ESCAP 2002a). The agricultural output of small-scale, community-based farming and the supplementary incomes from wage labour cannot be sustained if AIDS is allowed to rage unabated (UNAIDS 2002a).

In severe epidemics, food production and supplies, and even food security, can be threatened as HIV/AIDS-related morbidity and mortality worsen, as several southern African countries discovered

in 2002. In those countries, a combination of adverse weather, inappropriate policy adjustments and long-standing, severe HIV/AIDS epidemics created a food crisis that threatened some 14 million with starvation.

As rural livelihoods become less viable and secure, more young people migrate to urban areas. The absence of a familiar and stable social order, stressful living conditions and insecure income prospects can all make risk-taking more likely, including risks that expose people to HIV infections. Those who acquire the virus might, upon return to their rural homes, transmit it to partners there. In many instances, people also return to their rural homes for care, once their AIDS symptoms become manifest. These additional claims on limited labour capacity can further strain rural livelihoods.

A recent study in Papua New Guinea modelled the impact of HIV/AIDS on various sectors (CIE 2002). In the agricultural sector, the study suggested that the epidemic would limit the labour supply and push labour costs upward. The study projected that, by 2020, agricultural sector incomes would fall by as much as 8 per cent in a worst-case HIV/AIDS scenario. The effects on smallholder agriculture would be more pronounced, with sectoral output dropping by as much as 24 per cent in the same period.

Despite such outlooks, most national responses to HIV/AIDS have tended to follow health-based, urban-focused approaches that neglect agriculture and rural development, potentially compromising food security and rural livelihoods.

5. The public sector

HIV/AIDS affects Governments in numerous ways. At the most basic level, they face added pressures for greater health spending, which can force them to divert resources away from other key government investments in, say, education, infrastructure and governance.

Less well documented, but equally critical, is the potential impact of the epidemic on the ranks of professional staff. Particularly in the early phases of a severe epidemic, HIV/AIDS could hit disproportionately hard the ranks of well-educated and skilled income earners, including public servants, the police and the military. As the epidemic widens, they tend to constitute a smaller share of the

overall number of PLWHAs, but they continue to be affected. This poses an obvious threat to public sector capacity to provide and maintain key functions and services.

Government revenues could also be adversely affected, setting off a particular chain of effects in countries where State pensions and social security benefits play an important role (Lisk 2002). With fewer workers reaching retirement age, their overall contributions to these funds and schemes would decline. At the same time, the demand for sickness and death-related benefits and pensions would rise. Tax revenues, too, might decline if overall economic output and profitability suffer. All of these could put a squeeze on the supply of public and private sector investment capital, thus acting as a significant brake on economic growth.

B. Prospects and choices

1. Prevalence rates – with and without an expanded and comprehensive response

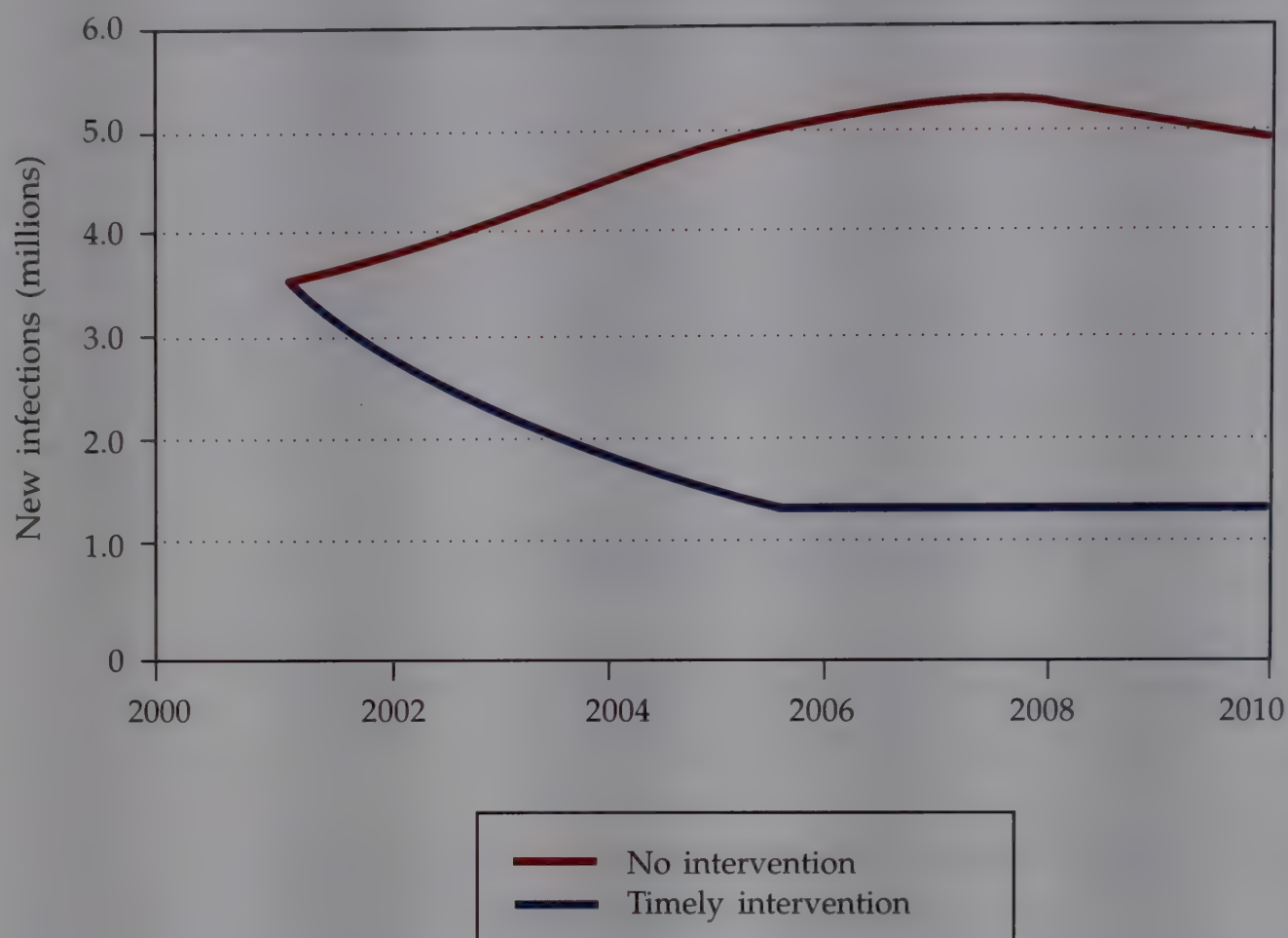
The HIV/AIDS pandemic thus far yields two bold lessons. If left to spread, HIV/AIDS could engulf whole regions and reverse decades of development progress. It is also equally clear that the epidemic does yield to human intervention.

The best current projections suggest that, between 2002 and 2010, an additional 45 million people will become infected with HIV in 126 low- and middle-income countries (currently with concentrated or generalized epidemics) unless the world succeeds in mounting a drastically expanded, global prevention effort. More than 40 per cent of those infections would occur in Asia and the Pacific, which currently accounts for about 20 per cent of new annual infections (UNAIDS/WHO 2002, p. 5).

A recent study in *The Lancet* (Stover and others 2002) suggests that if the success achieved in the prevention of transmission were expanded to the global scale, around 4 million new infections per annum could be prevented from 2005 onwards (figure IV.1).¹

¹ This analysis is based on epidemiological data, mathematical models of HIV-1 transmission and a review of the efficacy of prevention programmes on risk behaviours.

Figure IV.1. Projected new adult infections given the current degree of intervention and timely scaling-up of a package of comprehensive interventions



Source: John Stover and others, "Can we reverse the HIV/AIDS pandemic with an expanded response?", *The Lancet*, vol. 360, No. 9326, p. 75.

According to Stover and others (2002), the proportion of infections averted in different countries would vary according to the nature of the epidemic (generalized versus concentrated), the current level of HIV prevalence and the anticipated growth rate in HIV incidence (table IV.1). Their calculations indicate that the proportion of expected infections averted ranges from a low of 40 per cent in countries with stable or declining prevalence (such as Thailand) to a high of 70 per cent in countries with rapidly growing epidemics (such as China). Overall, nearly one third of all global benefits from an expanded and comprehensive intervention package would accrue to two countries, China and India (Stover and others 2002).

Table IV.1. Infections that can be averted between 2002 and 2010

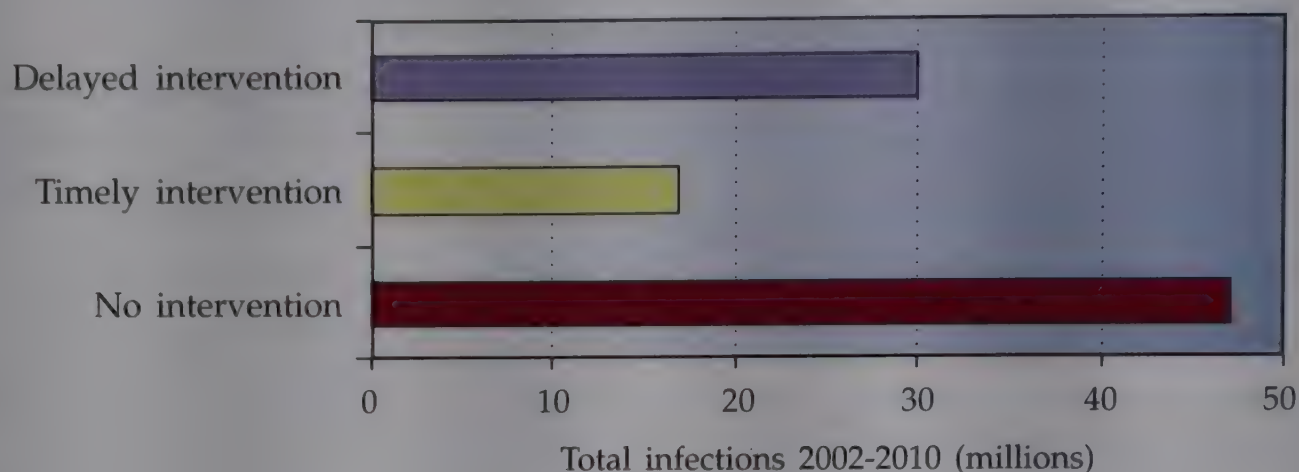
	<i>New infections, 2002-2010</i>			
	<i>Number of countries</i>	<i>Baseline (millions)</i>	<i>Expanded response (millions)</i>	<i>Proportion averted by expanded response (percentage)</i>
All low- and middle-income countries	126	45.4	16.9	63
By region				
Sub-Saharan Africa	38	21.0	8.8	58
Eastern Europe and Central Asia	24	2.8	1.3	54
North Africa and Middle East	15	0.9	0.3	62
South and South-East Asia	21	18.5	5.7	69
Latin America and the Caribbean	28	2.3	0.7	67
By type of epidemic				
Generalized	41	22.5	9.5	58
Concentrated	85	22.9	7.4	68
By 2001 prevalence level				
High (>5 per cent)	24	16.6	6.2	63
Medium (1-5 per cent)	25	5.0	2.8	43
Low (0.5-1 per cent)	13	9.7	3.4	64
Very low (<0.5 per cent)	64	14.2	4.4	69
By projected incidence trend, 2001-2005				
High (≥50 per cent increase)	80	14.8	4.6	69
Low (<50 per cent increase)	46	30.6	12.3	60

Sources: John Stover and others, "Can we reverse the HIV/AIDS pandemic with an expanded response?", *The Lancet*, vol. 360, No. 9326, p. 76.

A delayed response would significantly reduce the total benefits measured in terms of new infections prevented (figure IV.2). For example, the analyses suggest that a three-year delay in achieving full implementation of an expanded and comprehensive response would reduce by half the total number of new infections averted by 2010 (Stover and others 2002). Each year of delay would diminish the benefit in terms of new infections averted.

Clearly, immediate implementation of a comprehensive set of interventions can avert a large number of future infections and reverse the likely course of the AIDS epidemic.

Figure IV.2. Number of adult infections dependent on time of initiation of interventions



Sources: John Stover and others, "Can we reverse the HIV/AIDS pandemic with an expanded response?", *The Lancet*, vol. 360, No. 9326, p. 76.

2. Actionable interventions

(a) *Package of recommended actions*

There exists a package of recommended actions on requisite key interventions² to achieve the overall goals laid out in the United Nations Declaration of Commitment on HIV/AIDS. The package is composed of 25 categories of key interventions (box IV.1): 17 categories of prevention services, 5 categories of care services and 3 types of support for orphans. It is estimated that implementing a comprehensive programme composed of 12 of the prevention services in all low- and middle-income countries could avert more than 60 per cent of potential new HIV infections between now and 2010. Those 12 interventions are generally considered essential elements of an expanded response and are included in most national programmes.

It is feasible to achieve the goals and objectives of the United Nations Declaration of Commitment on HIV/AIDS and to reduce HIV prevalence levels among young people by 25 per cent by 2010 (see box IV.2). Wider benefits would be reaped too, including a

² Put together by a working group of the UNAIDS Economics Reference Group.

Box IV.1. Prevention interventions and care and support activities of the expanded response programme

Prevention interventions

1. Mass media campaigns
2. Voluntary counselling and testing
3. Condom social marketing
4. School-based AIDS education
5. Peer education for out-of-school youth
6. Outreach programmes for sex workers and their clients
7. Outreach programmes for MSMs
8. Harm reduction programmes for IDUs
9. Blood safety
10. Public sector condom promotion and distribution
11. Treatment of STIs
12. Workplace prevention programmes
13. Prevention of mother-to-child transmission
14. Post-exposure prophylaxis
15. Safe injections
16. Universal precautions
17. Policy, advocacy, administration and research

Care services

1. Palliative care
2. Diagnosis of HIV infection (HIV testing)
3. Treatment for opportunistic infections
4. Prophylaxis for opportunistic infections
5. ARV therapy, including laboratory services for monitoring treatment

Orphan support

1. Community support for orphan care
2. Orphanages
3. School fee support for orphans

Source: UNAIDS, "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years" (UNAIDS/PCB(13)/02.5).

generation of young people who are better educated, better informed and less likely to engage in high-risk behaviour in matters of sex and sexuality, harm reduction and HIV/AIDS prevention, a reduction in the incidence of other sexually transmitted diseases and fewer children infected through mother-to-child transmission.

Box IV.2. Declaration of Commitment on HIV/AIDS

Global priorities are now clear

New momentum in the fight against HIV/AIDS became evident in June 2001, when the membership of the United Nations met at a special session of the General Assembly to agree on a comprehensive and coordinated global response to the AIDS crisis. The members adopted a powerful Declaration of Commitment on HIV/AIDS and reaffirmed the pledge made by world leaders in their Millennium Declaration, to halt and begin to reverse the spread of AIDS by 2015. The Declaration of Commitment, adopted unanimously, now serves as a benchmark for global action. Its targets and goals include the need to:

- Secure more resources to fight AIDS;
- Ensure, by 2005, that a wide range of prevention programmes are available in all countries;
- Ensure that, by 2005, at least 90 per cent of young people aged 15–24 have access to information, education and services required to develop the life skills needed to reduce their vulnerability to HIV, and by 2010 95 per cent;
- Reduce, by 25 per cent, the rate of HIV infection among young people aged 15–24 in the most-affected countries by 2005 and globally by 2010;
- Reduce by 20 per cent by 2005 and 50 per cent by 2010 the proportion of infants born with HIV;
- Enact or strengthen, by 2003, anti-discrimination and human rights protection for people living with HIV/AIDS and for vulnerable groups;
- Develop or strengthen, by 2003, participatory programmes to protect the health of those most affected by HIV/AIDS;
- Empower women as an essential part of reducing vulnerability to HIV;
- Develop national strategies, by 2003, to strengthen health-care systems and address factors affecting the provision of HIV-related drugs, including affordability and pricing;
- Make treatment and care for people with HIV/AIDS as fundamental to the AIDS response as is prevention.

The Declaration of Commitment provides the world with a basis for effective political action and a yardstick of accountability. Indicators developed by the UNAIDS secretariat and co-sponsors, together with other stakeholders, will keep track of progress on all the key elements of the Declaration of Commitment.

Source: UNAIDS, *Report on the global HIV/AIDS epidemic*, (Geneva, UNAIDS, 2002).

(b) Interventions are cost-effective while the prevalence rate is low

It pays to act early. The evidence is overwhelming: early and strategic interventions can reduce the incidence of new infections and be cost-effective at the same time. While the prevalence rate is low, as it still is in most parts of the Asian and Pacific region, the benefits of prevention are highest.

In the ESCAP region, Cambodia and Thailand have demonstrated that properly focused and adequately resourced early intervention efforts can hold the epidemic in check by averting millions of new infections and saving millions of lives as well as millions of dollars (see box IV.3).

Box IV.3. The case of Thailand

Thailand ranks high on the short list of developing countries whose early action and public policy has been effective in preventing the spread of HIV/AIDS on the national scale.

At the heart of its early action, the national response was a massive public information campaign launched through the media, government and NGOs, as well as a programme to promote universal and consistent condom use in commercial sex. Importantly, the response was led by the multisectoral National AIDS Prevention and Control Committee (chaired by the then Prime Minister), which actively engaged NGOs and civil society. The results were dramatic. Fewer men went to brothels, condom use in brothels rose to more than 90 per cent, the number of consultations at STI clinics was reduced by 90 per cent and infection rates among army conscripts dropped by half in a few years.

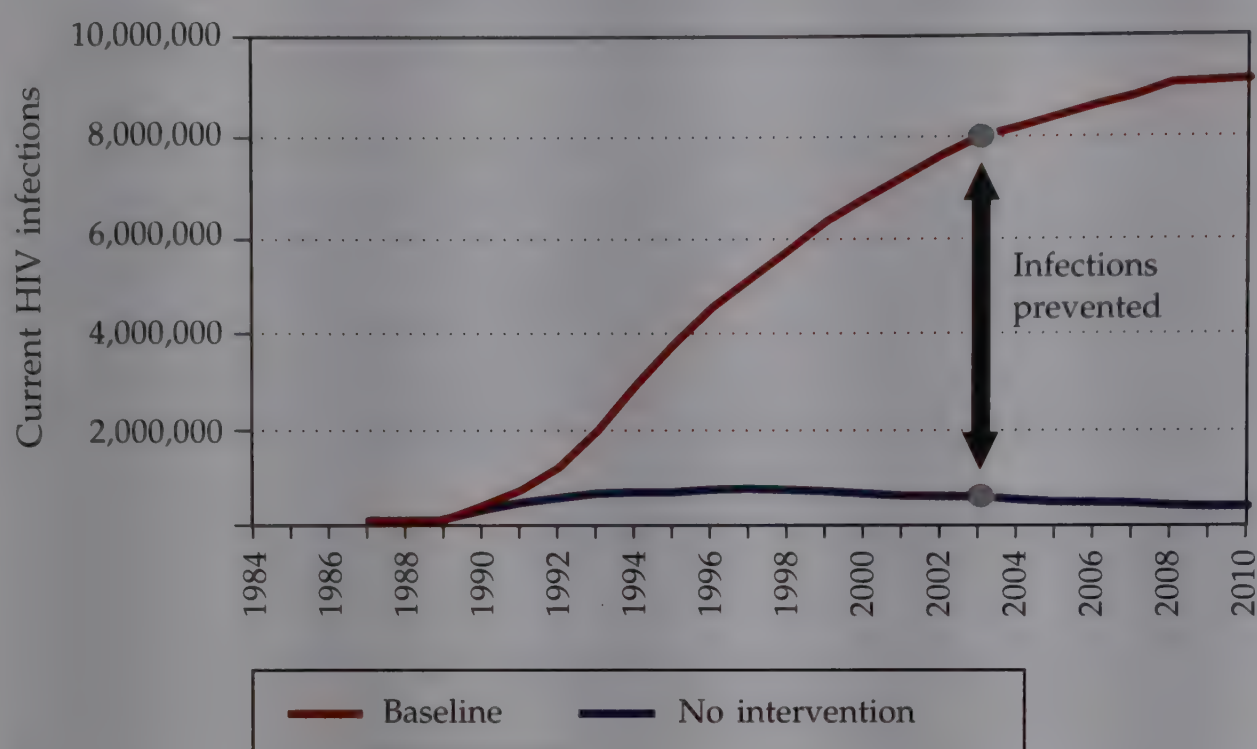
Importantly, public spending on AIDS prevention and control in Thailand expanded dramatically between 1987 and 1997, a sign of the greatly increased commitment of the Government. Added to this was the contribution of the private sector, which invested an additional \$80 million in 1991, for example.

Such investments in HIV/AIDS prevention have the potential of yielding high rates of return since increased numbers of AIDS cases entail medical expenditures for treatment and hospitalization and impose a demonstrable loss to society in the form of lost output and income. Research has estimated the rate of return on HIV prevention efforts, based on Thailand's efforts in the 1990s, to range from 12 per cent to 380 per cent annually, depending on the scenario posited. Looking at benefits calculated in terms of medical expenditures avoided, the rates of return range from 12 to 33 per cent over a 30-year period (the lower limit is an outcome of assuming growth of medical expenditures in line with per capita income). Moreover, if the averted income losses were to be included as additional benefits resulting from the reduced number of AIDS deaths (i.e., in addition to savings in medical expenditures), the rate of return rises steeply and then ranges from 37 to 55 per cent. Alternatively, if the value of an averted AIDS death is considered equal to the statistical value of a life, the rates of return of HIV prevention programmes jump to 380 per cent per year.

Finally, it is noteworthy that although Thailand's prevention efforts significantly slowed the spread of HIV/AIDS, they did not halt the epidemic. Even as the programme gained momentum, HIV was already spreading into the wider population, underlying the need to sustain prevention efforts and adapt them to the changing patterns of an epidemic. In addition, a growing need for treatment and care has to be addressed.

Source: Bloom, David E., Ajay Mahal, Jaypee Sevilla, and River Path Associates, "AIDS & economics" (http://www.riverpath.com/library/documents/aids_and_economics.htm) 2001.

Figure IV.3. Thailand: the benefits of prevention



Source: Tim Brown, "Dynamics of Asian HIV epidemics", paper presented at the Sixth International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 6 October 2001.

Both countries launched large-scale HIV/AIDS campaigns relatively early in their epidemics, concentrating on groups at most risk of infection. This enabled them to reduce the spread of HIV and save millions of citizens from infection, illness and eventual death. It has been estimated that Thailand could have had an estimated prevalence rate of 10 to 20 per cent

and lost an additional 6 million lives were it not for the interventions it launched early in the epidemic (figure IV.3).³ The cost-effectiveness of its response was considerable.

(c) The question of cost-effectiveness⁴

HIV/AIDS programme costs tend to rise substantially as national HIV prevalence rates grow. A study in sub-Saharan Africa, for instance, has shown that the prevention programme costs about US\$ 3 per person when the prevalence rate in the general population is below 5 per cent, but it more than triples to about US\$ 10 to US\$ 12 per person once the rate exceeds 15 per cent (Bonnel 2000). Clearly, it makes economic as well as moral, social and political sense to act early.

³ Another study suggests that if behaviours had remained unchanged at 1990 levels, there would have been over 12 million extra deaths as a result of AIDS in Thailand, cumulatively, by the year 2020, compared with current behavioral patterns (Bloom and others 2001).

⁴ "Cost-effectiveness ratios" match programme costs against their health-related outcomes (such as lives saved, life-years saved, or new cases of HIV prevented). Efficiency implies that a given output is achieved at the least possible cost or that the output is maximized at a given cost.

Inaction or delayed action entails losing ever-greater numbers of people in the prime of their lives. It also means forfeiting income-earning, productive, nurturing and caregiving potential, while incurring larger expenditures on medical care, as well as suffering the social trauma of family and community disruption.

While data have not been gathered on all potential interventions, the following HIV-prevention approaches have been found to be *cost-effective*⁵ in a number of resource-poor African countries (Marseille and others 2001):

- **Peer education** programmes have been shown to be highly effective in reducing transmission from and to sex workers. A 1991 analysis of 1,000 sex workers in Nairobi found that a programme of STI control and condom promotion was able to prevent between 8,000 and 10,000 new cases of HIV infection per year. Owing to its modest cost, the programme averted new HIV infections for only US\$ 8 to US\$ 12 each.
- A study of **STI services** in the United Republic of Tanzania found that these services had a statistically significant effect in lowering HIV incidence. The intervention costs were US\$ 350 per HIV infection averted or US\$ 13 per DALY (disability-adjusted life-year) gained.⁶
- A study on **voluntary HIV counselling and testing** in Kenya and the United Republic of Tanzania found that the costs per HIV infection averted were US \$249 and US\$ 346, respectively, while the costs per DALY were US\$ 13 and US\$ 18. The intervention was most cost-effective for HIV-infected people and for couples.
- Many studies have demonstrated that **male condom** promotion can reduce HIV transmission among vulnerable groups (see box IV.3). While no published studies consider it as a stand-alone intervention, male condom promotion is an adjunct to a cost-effective package of services, including peer education and STI control.
- A recent study analysed the cost-effectiveness of **female condoms**, if supplied to a hypothetical cohort of 1,000 commercial sex workers in South Africa. The study found

⁵ Interventions that are cost-effective refer here to interventions that avert a high number of HIV infections compared with alternative uses of the same funds.

⁶ DALYs are weighted to reflect quality of life and economic productivity aspects.

that this programme would generate net savings of US\$ 9,163 or about US\$ 9 per sex worker served for the public sector. A similar programme for people who are not sex workers, and who have only one casual partner, would also result in savings.

- The cost-effectiveness of **blood supply safety** programmes tends to vary depending on the levels of HIV prevalence in the service area. A 1995 study put the costs per HIV infection averted through screening the blood supply at US\$ 172, illustrating the high cost-effectiveness of such interventions.
- Recent modelling of **mother-to-child HIV transmission prevention** in a hypothetical population of 20,000 pregnant women in a working-class urban South African population concluded that "short-course" ARV interventions are cost-effective with or without formula feeding. For example, a regimen consisting of a single dose of nevirapine administered to a mother at the onset of labour and to the child within 72 hours of birth costs just US\$ 4 per mother-child pair.
- A number of studies, mostly from Australia, Canada, Switzerland and the United States, have demonstrated that various strategies to reduce the spread of HIV among IDUs are cost-effective (UNAIDS 2002a). A study in Belarus found that a comprehensive programme, including needle exchange, safe sex counseling, condom promotion, bleach and STI referrals, costs an average of US\$ 68 per HIV infection averted. If the costs of the free radio and press publicity for the programme were added, the cost per HIV infection averted would range from US\$ 240 to US\$ 442 (Kumaranayake and others 2000).

C. Commitment of resources to save our future

1. An expanded and comprehensive response

In the past few years, political commitment to respond to the HIV/AIDS pandemic has increased significantly. The convening of the United Nations General Assembly Special Session on HIV/AIDS in 2001 and the creation of the Global Fund to Fight AIDS, Tuberculosis and Malaria are two examples of this growing commitment at the global level (box IV.2). At the national level, low- and middle-

income countries, home to over 95 per cent of people living with HIV/AIDS, have made important progress in HIV/AIDS strategy and programme development (UNAIDS/WHO 2002).

This progress has been valuable and timely. But much more needs to be done. A drastically expanded, comprehensive set of interventions is needed to reverse the course of the epidemic. Realizing such an expanded response presents many challenges, not least of which are the sustained financial and political commitments that are required if the mandate set out in the Declaration of Commitment on HIV/AIDS is to be fulfilled.

An equally important issue is timely, adequate and unhindered flow of available funds for programme implementation. In most countries, fund flows to HIV/AIDS programmes are irregular and inadequate. In countries such as Bangladesh, India and Nepal, alternative fund flow mechanisms have been set up to address these issues. In India, the State AIDS Control Society facilitates the transfer of funds from the centre to states, without being diverted to non-HIV/AIDS expenses and without being delayed. Lessons from implementation experience indicate that there is scope for increasing the speed and regularity of fund transfers, particularly to community HIV/AIDS programmes.

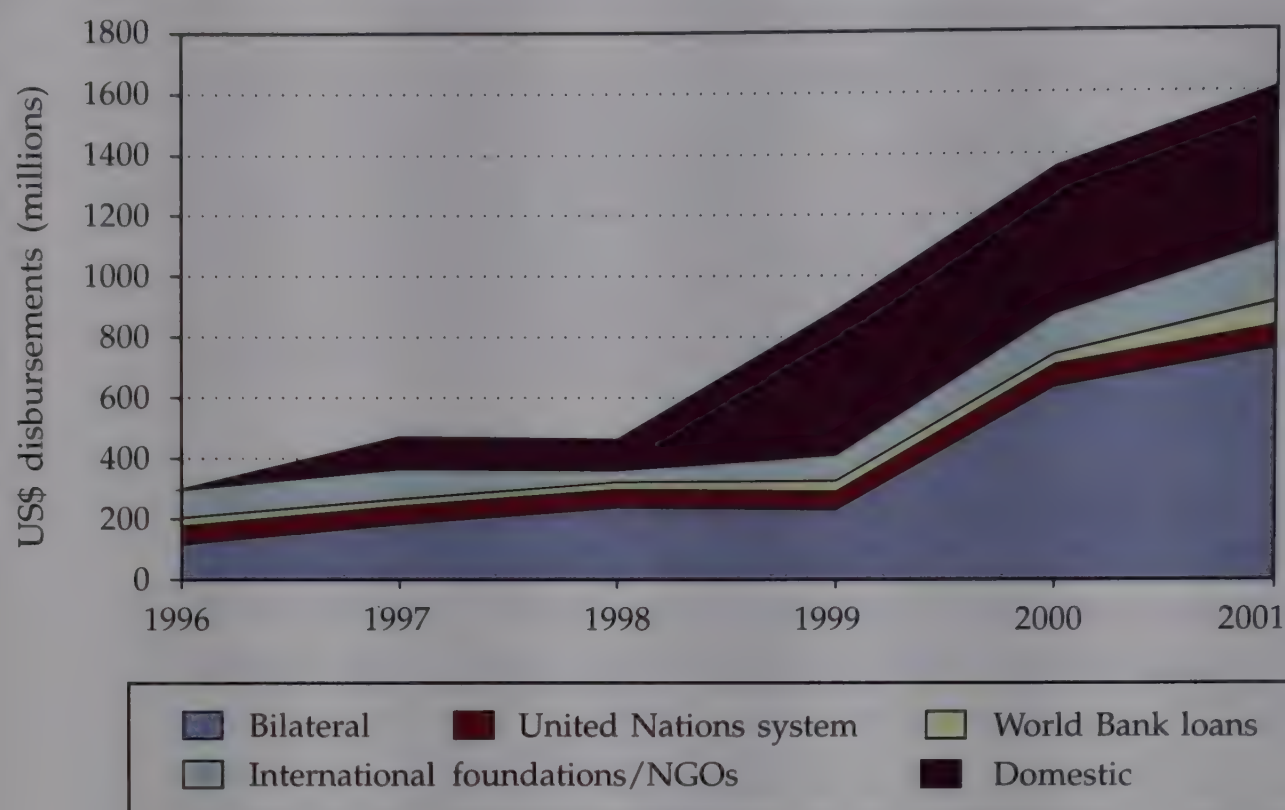
2. Trends in spending show increased financial resources for HIV/AIDS⁷

In the early stages of the pandemic, the international community invested very limited resources in addressing AIDS in developing countries. Since then, total international donor disbursements to affected countries for HIV/AIDS programmes have grown significantly, from US\$ 297 million in 1996 to a projected US\$ 1.8 billion in 2002. During the same period, national spending by Governments and NGOs in affected countries is estimated to have exceeded US\$ 500 million. Spending on HIV/AIDS has been increasing in absolute terms (figure IV.4). Based on analysis of budgets presented to legislatures or forecast thus far, financial resource availability is expected to total approximately US\$ 2.8 billion in 2002 when international, national and out-of-pocket expenditures are taken into consideration.

⁷ Unless otherwise stated, information for this section of the study has relied heavily on the UNAIDS report, "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years" (UNAIDS/PCB(13)/02.5).

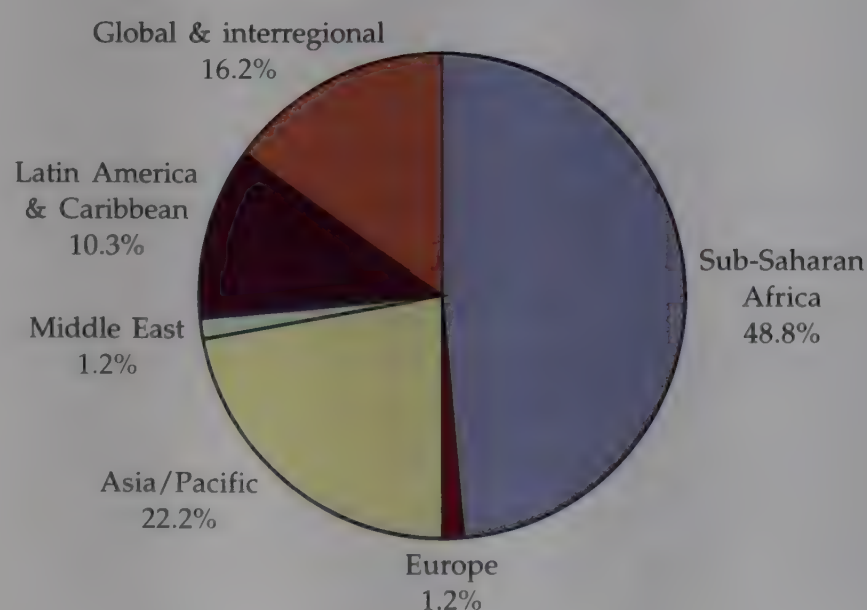


Figure IV.4. HIV/AIDS spending in programme countries, 1996-2001



Source: UNAIDS, "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years" (UNAIDS/PCB(13)/02.5).

Figure IV.5. Regional distribution of official development assistance for HIV/AIDS in selected donor countries



Source: UNAIDS, "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years" (UNAIDS/PCB(13)/02.5).

In terms of geographic distribution, in both 1999 and 2000 the largest percentage of HIV/AIDS assistance by international donors was destined for sub-Saharan Africa, with the Asian and Pacific region ranking second. Figure IV.5 provides a geographic breakdown of international funding for 1999.

An analysis of current spending shows increased funding by Development Assistance Committee (DAC) Governments, multilateral institutions, national Governments and NGOs in affected countries. Furthermore, in the case of five of the G-7 countries and eight other DAC Governments, HIV/AIDS spending is projected to be supplemented by disbursements to the

Global Fund to Fight AIDS, Tuberculosis and Malaria. By early 2003, US\$ 2.2 billion had been pledged to the Fund over a six-year period, through 2006.

3. Resource needs, availability and gaps

Unfortunately, the epidemic is outstripping the burgeoning financial support for the global fight against HIV/AIDS. That shortfall is one of the biggest obstacles blocking a comprehensive response. It has been estimated that US\$ 7 to US\$ 10 billion is needed annually to mount such a response in low- and middle-income countries. Such a funding level would represent a dramatic increase in global resources for HIV/AIDS. Nevertheless, as the United Nations Secretary-General has pointed out, this amount would be less than the amount of money that charitable foundations in the United States donate annually (United Nations 2001c), and is equal to approximately 1 per cent of the world's annual military spending (United Nations 2001d).

Global HIV/AIDS-related spending in developing countries and countries in transition in 2002 was projected to total approximately US\$ 2.8 billion. That figure includes international, national and (individual) out-of-pocket expenditure. While this would appear to compare favourably with the estimated programme capacity of US\$ 3.2 billion, it is important to distinguish between the total resources available for HIV/AIDS and the portion of those resources that are programmed directly against key interventions.

The total funding required for all key interventions is projected to increase from US\$ 3.2 billion in 2002 to US\$ 10.5 billion in 2005 and US\$ 15 billion in 2007, if the global HIV/AIDS response is to be expanded to a point where the epidemic can be reversed and its impact significantly diminished (UNAIDS, 2002b).

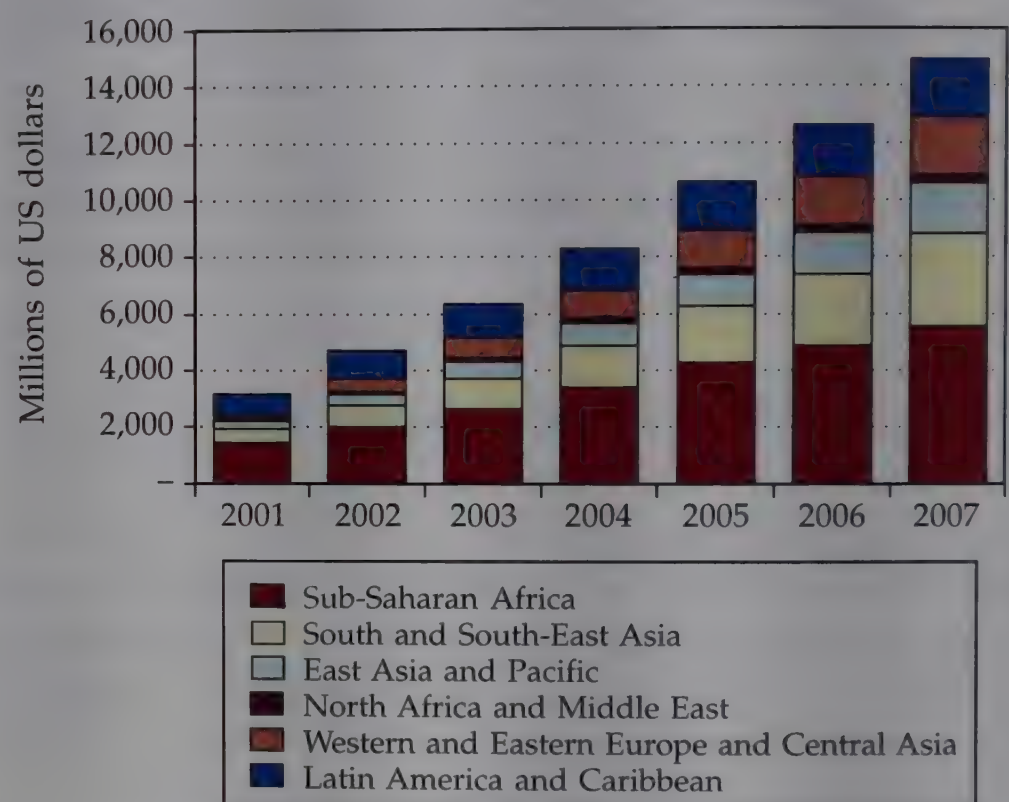
The disparity between programme capacity and funding availability is expected to approach US\$ 3.5 billion for 2003 and US\$ 5 billion for 2004.

Not included in the estimates for future resource requirements are infrastructure development costs. Once these are included, according to the WHO Commission on Macroeconomics and Health, the estimated funding needed would be between US\$ 13.6 billion and

US\$ 15.4 billion for HIV/AIDS prevention and care in 83 selected low- and middle-income countries by the year 2007, in addition to what is currently being spent (WHO 2001a).

Funding requirements by region are shown in figure IV.6. By 2007, sub-Saharan Africa will require some US\$ 5.5 billion, more than a third of the global requirements. South and South-East Asia will need some US\$ 3.3 billion, about one fifth of the total.

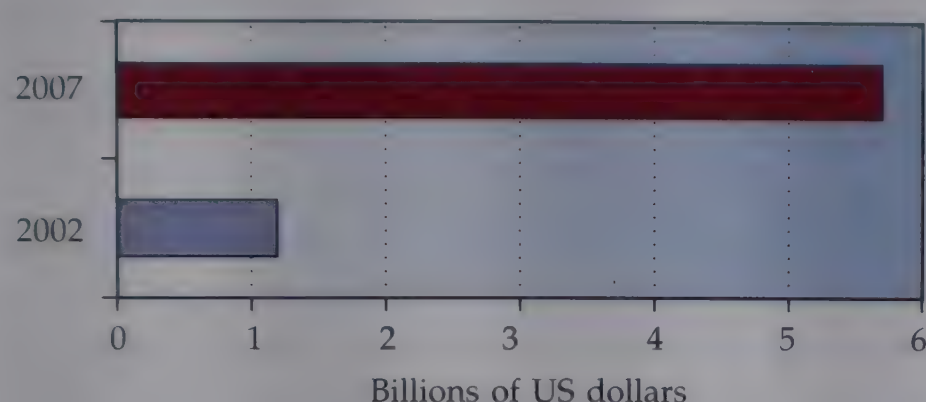
Figure IV.6. Global resources needed by region



Source: UNAIDS, "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years" (UNAIDS/PCB(13)/02.5).

Figure IV.7 shows that, in the Asian and Pacific region, estimated *spending* on prevention and care needs in 2002 for 33 selected countries was about US\$ 1.25 billion. The required spending on prevention and care in 2007 for these 33 countries is estimated at about US\$ 5.6 billion. Comparing the total needs in 2007, therefore, with the estimated spending in 2002, the resource gap is about US\$ 4.3 billion for these 33 countries. In other words, there is a 78 per cent gap between resource needs and availability for mounting an effective HIV/AIDS response.

Figure IV.7. Asia and the Pacific: Estimated (2002) and projected (2007) financing requirements for prevention, orphan care and treatment (2000 prices)



Source: UNAIDS, "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years" (UNAIDS/PCB(13)/02.5).

By 2007, however, all low- and middle-income countries in the ESCAP region would need US\$ 7 billion, that is, almost one half of the total resource requirements (UNAIDS 2002b).

As for the sources of funding, up to 80 per cent of the resource needs may have to come from international sources in Africa and South and South-East Asia. For the other regions, more than half and up to 90 per cent of the resource needs could be met domestically (Schwartlander and others 2001).

D. Conclusion

By 2010, in just 21 countries of the Asian and Pacific region more than 18 million new HIV infections may be expected. That would be a pace of infection more than twice what it is now.

The sheer scale of the possible effects, compared with the tremendous benefits that can be realized if action is taken, is perhaps the strongest argument for action by Governments, the private sector and indeed all stakeholders. That action needs to happen now.

The rationale for immediate action is twofold. First, early intervention averts more infections. Delays in achieving full implementation of an expanded and comprehensive response would

Box IV.4. The case of Cambodia

Using a United Nations model, Cambodia performed a costing exercise, in 2002 to determine its resource requirements for HIV/AIDS programmes by 2005. The following sections highlight just two of the key interventions outlined in Cambodia's National Strategic Plan (NSP), which reflects the overall goals of the United Nations Declaration of Commitment. The costing exercise, which represents a turning point in Cambodia's effort to tackle the epidemic, could be replicated elsewhere.

(a) Treatment

One of the treatment objectives of Cambodia's NSP is to provide highly active antiretroviral therapy (HAART) to about 40 per cent of people in need by 2005. Modelling estimates suggest that about 26,000 Cambodians would need palliative care in that year. Since the cost of HAART varies greatly depending on factors such as the availability of generic drugs, and the non-drug cost of HAART, it was estimated for the purpose of the General Assembly Special Session that HAART drugs could cost as much as US\$ 3,900 per year. However, in the final calculations, a lower cost estimate of \$392 per patient per year for medications and \$140 for lab costs was used. This is less than the current cost in Cambodia, but assumes that a level of price discounts for drugs will continue through 2005. At present, HAART is available to only a very few Cambodians who need it. With a scaled-up programme, however, it is estimated that as many as 11,000 Cambodians could potentially have access to HAART by 2005. If this scale-up occurs, Cambodia would need to obtain resources of approximately US\$ 5.9 million to pay for medication and additional laboratory costs.

(b) Prevention

One of NSP's strategic objectives related to prevention services for youth is to train 20 per cent of all teachers in HIV/AIDS prevention each year, by 2005. The resources required for such youth-focused interventions include the training of primary and secondary school teachers in HIV/AIDS issues, as well as the cost of managing a peer education programme for out-of-school youth. Cambodia's modelling exercise assumed that 20 per cent of all primary and secondary school teachers would receive such training every year, at a cost of US\$ 35 per teacher trained. Furthermore, the model assumed that 30 per cent of out-of-school youth between the ages of 12 and 15 could be reached at a cost of US\$ 8 per youth per year. The youth-focused interventions would therefore cost about US\$ 3.1 million in 2005.

(c) Who will pay?

Such costing exercises have provided Cambodia with a much clearer understanding of its HIV/AIDS funding needs, and of the kinds of shortfalls it would have to overcome to achieve all the goals established in the NSP, amounting to US\$ 55 million in 2005. This is a significant but feasible increase in new HIV/AIDS resources that international donors and the Government of Cambodia can together mobilize.

Source: Steven Forsythe "Resource Requirements for Cambodia's 2001-2005 HIV/AIDS National Strategic Plan" (<http://www.policyproject.com/pubs/countryreports/ACF1111.pdf>, 2002).

reduce by half the total number of new infections that could otherwise be averted by 2010. Second, early intervention is cheaper. Money spent fighting AIDS pays for itself more than thrice over, if health-care costs, lost productivity and the economic value of lives saved are added up.

Even if not based on the worst-case scenario, any new HIV infections can and should be avoided. People living with HIV/AIDS do not have to die early and painful deaths, leaving behind mourning families, millions of orphans and social and economic upheavals. All that is required is for all people everywhere to be given the information, education, skills and full access to the ways they need to protect themselves and others. Treatments are available that can markedly extend and improve the quality of life of PLWHAs. In other words, societies are not powerless against the pandemic.

For interventions to be implemented, resources are required. The resource availability for an expanded and comprehensive response does not match the resource needs for the growing epidemic. All low- and middle-income countries in the ESCAP region would need an estimated US\$ 7 billion by 2007. Conservative figures suggest an 80 per cent resource gap.

Equally important is the timely, adequate and unhindered flow of available funds for programme implementation. In most countries, fund flow to the community is less than ideal. Where alternative fund flow mechanisms have been considered, these measures have neglected the need for rapid and regular flow to community prevention programmes.

As the world moves into the third decade of HIV/AIDS, the national and international communities have a historic opportunity to take advantage of growing public support to fight HIV/AIDS in developing countries. What is needed most urgently is the political will to provide adequate financial resources that can support a comprehensive approach which includes significantly expanded HIV/AIDS prevention, treatment and research. This response would have to be in addition to national efforts necessary to ensure food security and provide health and education for all.

This region has the gift of time because the catastrophe has not reached the same scale as in sub-Saharan Africa. The epidemic will inflict untold suffering across the region unless all Governments

follow the lead of Cambodia and Thailand and act promptly to curb the spread of the disease. Citizens, especially PLWHAs, and their leaders throughout the ESCAP region may look back upon this time as the deciding moment, the opportunity when concerted efforts could have made – or did make – a huge difference.

CHAPTER V

POLICY OPTIONS

*"Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up into fragments by narrow domestic walls;
Where words come out from the depth of truth;
Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit;
Where the mind is led forward by thee into ever-widening thought and action;
Into that heaven of freedom, my Father, let my country awake."*

Rabindranath Tagore
(First Asian Nobel Laureate)

Introduction

We are living in extraordinary times of hope and despair. The fate and future of billions of lives are threatened by HIV/AIDS, a looming pandemic that casts a dark shadow over the Asian and Pacific region. It could jeopardize gains made in national health and education systems and eventually endanger development processes initiated at enormous cost.

Governments of the region are at a crossroads. Confronted with the HIV/AIDS pandemic, they have to make vital choices. Making those choices will require leadership marked by vision and courage. Special mechanisms, institutions, policies, resources and a new process are essential elements of an adequate response to the challenge that the pandemic poses to the region with two thirds of the world's population.

A starting point for such a response lies in the commitments made by Governments of the region at international forums such as the International Conference on Population and Development (Cairo,

1994), the World Summit for Social Development (Copenhagen, 1995), the Fourth Women's Conference (Beijing, 1995), the United Nations Millennium Summit (New York, 2000), the United Nations General Assembly Special Session on HIV/AIDS (New York, 2001), the World Summit on Sustainable Development (Johannesburg, 2002), the fifty-seventh annual session of ESCAP (Bangkok, 2001) and the Fifth Asian and Pacific Population Conference (Bangkok, 2002). Addressing HIV/AIDS as a development challenge can best be achieved by honouring the related commitments made at those international forums (see box V.1).

An adequate response to stem the spread of the pandemic must cover the following policy areas: policy environment; resource generation and flow; institutional mechanisms; action on commitments; and scaling-up of interventions. For each policy area, recommendations are elaborated below.

A. Policy environment

1. Meeting HIV/AIDS as a development challenge: full mobilization of all levels of government and all sectors

HIV/AIDS issues have conventionally been the domain of medical health specialists. However, HIV/AIDS has an impact on a wide spectrum of development dimensions. These include gender, health, education, rural development and agriculture, industry, the business community and labour.

In many cases, the onset of the epidemic is precipitated by poor performance in key development sectors, such as health and education. Once triggered, the epidemic in turn affects the course of development.

Basic factors in its onset and spread, such as lack of health facilities and services for disadvantaged groups, limited educational opportunities and gender inequality must be addressed. At the same time, the proximate factors must also be dealt with in a comprehensive manner. These proximate factors include lack of knowledge and awareness, non-availability of condoms and lack of access to treatment for HIV/AIDS and STIs, clean needles and syringes, and safe blood and blood products.

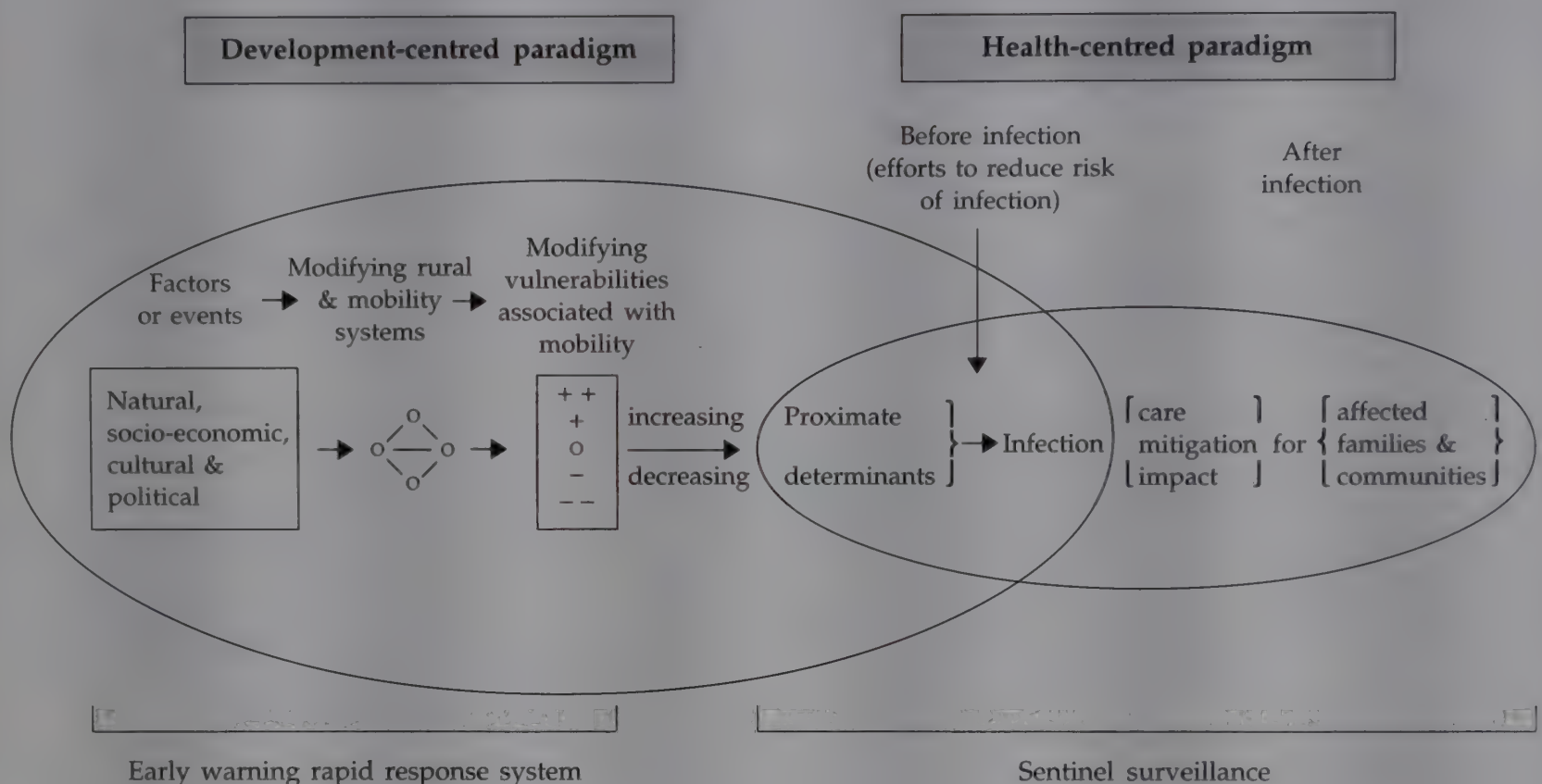
Box V.1. Selected millennium development goals and the effect of HIV/AIDS

<i>Millennium development goals</i>	<i>Effect of HIV/AIDS</i>	<i>Impact of AIDS on progress towards the goals</i>
Reduce income poverty: Halve, by 2015, the share of the world's people whose income is less than one dollar a day.	AIDS increases consumption needs and depletes household assets. Labour losses reduce income. Can push household incomes down by 80 per cent. Increases household poverty. Weakens public infrastructure needed to reduce poverty.	Will slow or reverse progress towards the goal. For example, in Burkina Faso the proportion of people living in poverty is projected to increase from 45 per cent to nearly 60 per cent by 2010 as a result of HIV/AIDS.
Reduce hunger: Halve, by 2015, the proportion of people who suffer from hunger.	The poverty impacts may be intergenerational. Illness, reduced incomes, lower productivity of subsistence agriculture and crop shifts increase food insecurity, especially for women and children. Quality of diet important for improved survival, but more difficult to secure owing to illness.	Survival with HIV makes this a critical goal, while AIDS makes it more difficult to achieve owing to reduced food availability, access, intake and absorption. Studies in Thailand have found that food consumption in affected households falls by 15 to 30 per cent.
Increase access to safe water: By 2015, halve the proportion of people who are unable to reach or afford safe drinking water.	Illness, increased labour demands for caring and lost labour reduce time for collecting water, especially for women. Human resource losses and costs in water supply services affect delivery and increase the cost of services to households.	Loss in household resources and labour time make easy access to safe water critical. The epidemic will slow or reverse progress towards this goal.
Universal primary education: By 2015, ensure that boys and girls will be able to complete a full course of primary schooling.	Education supply threatened by teacher absenteeism and deaths. Children from households facing lost income and demands for caring fall out of school. Households and schools face increased stress. Education, especially for girls, is critical in preventing infection and delaying the onset of sex.	In the worst-affected countries, education quality and enrolment, especially among the most vulnerable groups, have already been reduced. For example, in the Central African Republic and Swaziland, school enrolment is reported to have fallen by 20 to 36 per cent owing to AIDS and orphanhood.
Improve child health: Reduce under-five child mortality by two thirds of its current rate by 2015.	Infant and child mortality will continue to increase for the next decade, and possibly longer, owing to mother-to-child HIV infection and the more general poverty-creating effects of the epidemic.	Without action the target will not be met and in some countries there will be a deterioration over the period. For example, under-five mortality in South Africa will increase to 160 per 1,000 live births by 2010, instead of falling to 44/1,000 (as per the millennium development goal) by 2015.
Achieve gender equality: Ensure that girls and boys have equal access to all levels of education.	Girl children are more likely to be kept out of school to provide care or when resources are limited. Women take on greater burdens of caring and face greater economic insecurity when wage earners fall ill. While gender equity (social and economic) is a critical factor in reducing risk, AIDS exacerbates burdens on women and gender inequalities.	Goal cannot be met in seriously affected countries. In some of the worst-affected countries, nearly 50 per cent of children who lose their parents to HIV/AIDS drop out of school. The majority of them are girls.

Source: Hakan Bjorkman, "HIV/AIDS and poverty reduction strategies", Policy Notes, August 2002 (New York, UNDP, 2002).

The HIV/AIDS pandemic must therefore be addressed as a development challenge. The national response to the HIV/AIDS epidemic must include three dimensions: (a) measures to address its basic causes, (b) provision of preventive health care and (c) programmes for the care and mitigation of the impact of HIV/AIDS on PLWHAs and their families. These are summarized in figure V.1.

Figure V.1. Meeting HIV/AIDS as a development challenge



Source: Adapted from Jacques du Guerney and Lee-Nah Hsu, *Early Warning Rapid Response System: HIV Vulnerability Caused by Mobility Related Development* (Bangkok, UNDO/UNOPS, July 2000 p. 2.).

The national response should therefore include the following components:

- *Intensification of education, health and food security efforts, to achieve progress on the unfinished development agenda, including poverty reduction strategies.¹*

¹ The millennium development goals of the United Nations, adopted by the United Nations General Assembly in September 2000. See Bjorkman (2002) for a commentary.

- *Effective integration* of HIV/AIDS concerns into *national development planning, sectoral plans and poverty reduction strategies*, as well as into *all ministries* directly involved at the front line of development, such as finance, health, education, rural development, agriculture, industry and transport, to accelerate the development process and tackle the HIV/AIDS epidemic.
- *Support* for *greater social mobilization* efforts to accelerate the development process in general and tackle the spread of the epidemic in particular.
- *Action* on the *economic empowerment* of women and *gender equality* as a national priority in the fight against HIV/AIDS.

Expansion of *policy* and *public action* to provide a robust health delivery system that works for the prevention of HIV/AIDS and promotes *compassion* and *care* for PLWHAs, as well as to minimize stigma and discrimination against PLWHAs and their families.

2. Establish a planning system

To meet the challenge of HIV/AIDS, a system of planning should be established. The system may be composed of a national plan and sectoral plans for all ministries at the central (federal) level and state or provincial plans, wherever applicable.

In that regard, the planning process must be informed by the following essential principles of planning, as matters of both policy and practice:

- *Planning* for action on HIV/AIDS issues must be pursued at *all levels*, be strategic and long-term and deal with the factors that trigger the epidemic, as well as those that fuel its spread.²
- The planning process has to provide a *participatory platform* for achieving a higher level of synergy among ministries, departments and sectors, in tackling the epidemic through a multiministerial approach.

² The strategic plan to fight HIV/AIDS prepared by the Royal Government of Cambodia contains valuable lessons. See United Nations Country Team in Cambodia (2002).

- The national strategic plan, as a matter of policy, should be predicated on the participation of *all stakeholders*, including PLWHAs, groups with high-risk behaviours and community representatives.³
- A successful strategy to meet the HIV/AIDS epidemic includes the:⁴
 - Assessment of *ministry capacity* to anticipate the onslaught of the epidemic and prepare for it accordingly.
 - Assessment of levels of HIV *awareness and knowledge* among workers in the respective sectors under the ministry and any productivity loss that might be associated with an HIV/AIDS epidemic.
 - *Recruitment and training* of staff to deal with HIV/AIDS issues in the areas of responsibility under the purview of the ministry, including workforce morale as the epidemic hits sectors and support for victims of HIV/AIDS.
 - *Monitoring*, on an ongoing basis, the impact of HIV/AIDS within the ministry/departments, through internal and external assessments, to identify remedial responses within the remit of the ministry.
 - Developing ministry-specific *impact assessment* and responses that are synchronized with those of other ministries and departments.

3. Focus on preventive and promotive health care, with special attention to HIV/AIDS

Within the health sector, the response has to be multidimensional.

A clear policy is required to develop preventive and basic health services for hard-to-reach groups, such as sex workers, IDUs and MSMs. That clear policy has to have sufficient safeguards for the delivery of health services to these groups through the regular health-care infrastructure. Such a policy must also be based on a pragmatic approach to the implementation of laws to create space for

³ The national plan developed by the Royal Government of Cambodia to deal with the HIV/AIDS epidemic has adopted this approach.

⁴ The tools developed by the Government of South Africa provide a useful reference.

the delivery of health interventions to groups such as sex workers and their clients, IDUs and MSMs. These interventions can be implemented through outreach programmes and as part of overall community development, in partnership with civil society organizations working with and for disadvantaged communities.

A separate policy is required to develop special health services, including intervention programmes on HIV/AIDS prevention, for groups of reproductive age who are as yet not catered for by any such interventions. Those groups include young women and men, as well as migrant and mobile populations, many of whom are young anyway. A largely neglected group that requires policy consideration is the prison population. Another group that warrants policy attention is older persons.

A mandatory policy is also required for HIV/AIDS prevention among formal and informal sector workers. The policy of providing health care to employees in the public and private sectors must include integration of STI treatment, preventive health-care services for HIV/AIDS and client-friendly programmes for PLWHAs. These must be incorporated into all health safety-net programmes for employees in workplaces.

To be effective in meeting the challenge of HIV/AIDS, the policy of basic health-care service provision must be considerably strengthened. The strengthened policy should include the following components:

- Maintaining the national health *infrastructure* and health *delivery system* at a high level of efficiency, with a stronger *service and user orientation*, to meet the challenges of HIV/AIDS. The challenges include coping with the additional strain of preventing HIV/AIDS and caring for those who are living with HIV.
- Incorporating HIV/AIDS prevention measures into existing health services and removing barriers to ensure *wide access* to preventive health-care services.
- Enhancing the “user-friendliness” of health services, including through the introduction of *gender-sensitive*, especially girl- and women-friendly, STI services and antenatal programmes.
- Improving the general *availability* and *affordability* of health-care facilities for voluntary counselling and testing for detection of HIV/AIDS and protection for the rights of those tested.

- *Upgrading staff capacity* to deal with the epidemic as a high priority.
- Providing *prophylactic treatment* to health workers, who may suffer from “needlestick” injuries and other opportunistic infections.

To have comprehensive preventive health care for PLWHAs, the following components are required:

- Policy of *public funding* of research on, and assistance in, the development of HIV/AIDS preventive vaccines that are best suited to Asian and Pacific conditions.
- A *wide spectrum of measures* to prevent the spread of HIV infection among vulnerable groups. These include prevention fundamentals, such as a strong focus on young people. Also included are promotion of condom use as a simple and effective prevention measure, use of clean needles and syringes, provision for treatment of IDUs, and measures to ensure the availability of safe blood and blood products.
- A *better understanding* of the main modes of HIV transmission and wider *social acceptance* of PLWHAs, not only among decision makers, but also at all levels of society, are central to mobilization for action against stigma and discrimination.
- Improvement of the *design* and *coverage* of current efforts, to reach wider geographic areas and more vulnerable groups.
- Steadfast support for the development of *women-friendly HIV preventive* measures that enable women to strengthen their autonomy and their ability to negotiate for safer sex and to protect themselves from HIV/AIDS, including through the development of better female condoms and microbicides.

4. Strengthen the integral link between prevention and care-treatment-support

Preventive and promotive health care, as well as care, treatment and support, have to be part of a continuum in dealing with the HIV/AIDS epidemic. It is therefore imperative that care, treatment and support for PLWHAs form an essential part of a national response to HIV/AIDS, with prevention as its long-term foundation.

It is also important that user-friendly services be made available for vulnerable groups and for PLWHAs. A conducive environment must also be created for easier access to those services. The services include the provision of condoms, clean needles and syringes, safe blood and blood products, voluntary counselling and testing, and the treatment of sexually transmitted infections.

5. Guarantee equitable access to antiretroviral treatment (ART) and other HIV-related medicines

Guaranteed equitable access to HIV-related drugs, especially for the poor in developing countries of the region, has to be an essential component of the national response, which should include, but not be restricted to, the following actions:

- Expand the development and production of *ART* so that cheaper and more easily administered ART can be made more widely available.
- Increase, through government pharmaceutical industry action, the *availability* of affordable drugs, including drugs to treat opportunistic infections.
- Engage in WTO negotiations, consistent with the agreement reached at the Ministerial Meeting at Doha in 2001, to exempt from national legislation governing *intellectual property rights* the patenting of life-saving drugs, such as ARVs, that directly affect PLWHAs.
- Utilize fully the exemptions from patent protection of *life-saving drugs* such as ARVs, which are open to least developed countries until 2016, and permissible under the WTO Agreement on Trade Related Intellectual Property Rights.
- Reform national *legislation* to achieve the lowest prices for good-quality pharmaceutical products required to meet the challenge of HIV/AIDS and ensure that Governments are able to use the flexibility permitted under WTO.

6. Act with political courage, statesmanship and sagacity

To guide nations in crisis, Governments in the region will have to make a strong political commitment and demonstrate political will. To accomplish that, Governments must adopt a policy directed towards:

- *Breaking the silence:* Although the pandemic has reached serious proportions, a veil of secrecy shrouds the epidemic. In the early stages, when the virus is in its latency, there is little public discussion on the epidemic and related issues. This silence kills. Governments must protect the people from the epidemic by publicly acknowledging the existence of the HIV epidemic. Governments in the region have to break the silence around HIV/AIDS in general and groups such as MSMs in particular.
- *Devising a national response:* Since HIV/AIDS yields to concerted interventions and the modes of transmission are known, focusing HIV prevention efforts on vulnerable groups has reduced the transmission of HIV to the general population in many countries. However, such a response cannot halt the spread of the epidemic in the long run. To halt the epidemic, a comprehensive response is absolutely necessary.

In a comprehensive national response, there must be specific interventions that address the diverse needs of all vulnerable groups. Thus, for example, while exchange of needles and detoxification have to be provided for IDUs, interventions, such as sex education in schools and the provision of condoms in a user-friendly environment that specifically targets young people, must be separately mounted. The cost of interventions should not be used to justify inaction on programmes for young people, who are numerous in most Asian and Pacific countries. Chapter III discusses interventions which are considered essential to an expanded response and are included in most existing national programmes.

- *Sequencing and flexibility:* The national response must recognize that certain groups such as sex workers, IDUs, MSMs and migrant workers are among the first to be affected at the early stages of an HIV epidemic. Governments, as a matter of policy, must target such groups early on to stop its spread and minimize suffering. These groups also suffer from negative stereotyping, both because they tend to be the first to acquire the virus and because their behaviour is often deemed illegal. For interventions to reach them and for them to access services, it is necessary to foster a more conducive policy milieu.

- *Interpretation of laws and their implementation must be consistent with this conducive milieu.*⁵ In place of a tough legal approach that criminalizes vulnerable groups, such as IDUs, MSMs and sex workers, a prevention approach that encourages the participation of these groups in intervention programmes would yield significantly better results.
- *Transcending misconceptions:* The challenge to Governments in the region is to adopt policies that initiate interventions that seem to be politically controversial and socially sensitive, but that have the highest impact. Governments need to transcend misconceptions that working for vulnerable groups (e.g., sex workers, MSMs and IDUs) would reflect negatively on the Government and the country.⁶ Yet the political executive must make such essential decisions for early prevention boldly and with foresight. It is noteworthy that leaders of countries and their Governments which had taken such bold decisions in the past have earned widespread national support and international acclaim.⁷

B. Resource generation and flow

1. Ensure adequate resources for implementing the national HIV/AIDS response

It is crucial that domestic resources be secured for an effective, sustained and countrywide response, with essential coverage of areas, bridge populations and vulnerable groups. Increases in the flow of international resources, such as from the Global Fund to Fight AIDS, Tuberculosis and Malaria, may be sought to meet the shortfall in resources for a sustained national response.

Domestic resource generation needs to be buttressed by the following actions:

⁵ In Thailand, for example, although commercial sex is illegal, the distribution of condoms in all the brothels in the country has been sanctioned by the State.

⁶ For example, initiating sex education in schools and widespread distribution of condoms may be misinterpreted as promoting promiscuous behaviour among younger people, adding to perversiveness in society.

⁷ Brazil, Cambodia, Senegal, Thailand and Uganda are examples.

- Encouraging all agencies involved in meeting the challenge of the HIV/AIDS epidemic to *raise resources*, internally and externally.⁸
- Harness *community resources* to combat the epidemic at the local level.⁹
- Explore novel ways of generating resources, including through *reductions in non-development public expenditures*, such as from savings on war and war preparedness expenditures, to free resources for fighting the epidemic, in consonance with the spirit of the United Nations Secretary-General's question, "*If you can mobilize resources for war, why can't you mobilize resources for life?*"

2. Mobilize full corporate sector potential to operationalize the national HIV/AIDS response

The corporate world has undergone a radical transformation over the past decade. Corporate citizenship is now an essential element of contemporary corporate identity. The strength of modern corporations in research and resources is phenomenal. With the growing number of corporations in the region, it is strategic and mutually beneficial for Governments to build partnerships with the corporate sector to fight the spread of HIV/AIDS.

Governments can create a conducive environment for the corporate sector to discharge its social responsibilities and demonstrate good corporate citizenship¹⁰ by:

⁸ There are several examples of development-focused resource mobilization by subnational-level entities. Lessons can be drawn from the experiences of the Self Employed Women's Association (SEWA), Ahmedabad, India, set up in 1972 (SEWA n.d.) the Orangi Pilot Project on urban development (1980-1993), Karachi, Pakistan (ESCAP n.d.), and the Bangladesh Rural Advancement Committee, Dhaka, Bangladesh, set up in 1972 and subsequently renamed as only BRAC, Bangladesh.

⁹ There are several instances of significant community responses in resource mobilization during times of calamity. For examples see UNDP (2001a).

¹⁰ The Bill and Melinda Gates Foundation, in the United States, the Prince of Wales International Business Leaders Forum in the United Kingdom, and the Naandi Foundation in India are examples of public and private sector partnerships that focus on critical development issues, such as HIV/AIDS and poverty.

- Playing a *stronger role* in the national HIV/AIDS response.
- Generating resources to *supplement* State efforts.
- Implementing HIV/AIDS *workplace intervention* programmes.
- *Supporting* treatment and care for employees living with HIV/AIDS.

Modern corporations could be urged to play an expanded role in the HIV/AIDS response through measures such as the following:

- Promote *research* to develop vaccines against HIV and drugs for the treatment of HIV/AIDS,¹¹ and opportunistic infections.
- Evolve a *code of conduct* by which the corporate sector itself can help to ensure that the interests of PLWHAs take precedence over strictly “for-profit” business decisions.¹²

3. Encourage the formation of a donor consortium to fight the spread of HIV/AIDS in the Asian and Pacific region

International and bilateral donor agencies are allocating more resources (in absolute terms) for combating HIV/AIDS. Each agency has its own goals and objectives. As national responses increasingly deal with HIV/AIDS as a development issue, it is critical that donors share this development perspective.

Without an alignment of the goals and objectives of the donor community with national responses, resource flows may not synchronize well with national objectives. Governments in the region should thus engage in dialogue with donor agencies to encourage the formation of a donor consortium. An important feature of such a consortium would be a common HIV/AIDS framework for efficient resource utilization that would be effective in supporting national priorities and stopping the spread of HIV/AIDS in the region.

¹¹ Research by Ranbaxy Laboratories Limited, India, for the treatment of HIV/AIDS, and by VaxGen, United States, are examples of corporate sector good practice that inspire hope.

¹² The codes of conduct adopted by the medical profession and the Bar Associations in many countries for regulating the conduct of their own members have long existed.

4. Make special provisions for the smooth flow of funds

Resource mobilization is critical. Effective resource deployment is equally critical. The all-too-common experience of a delayed flow of funds hampering relief needs to be reversed. Governments may therefore consider the following actions:

- Put in place regulations and practices for the *speedy transfer* of funds and the disbursement of HIV/AIDS resources to executing and implementing agencies, in order to expedite their timely receipt and utilization.
- Create, where necessary, *new channels* for expeditious fund transfer and set up autonomous institutions to facilitate the receipt and disbursement of funds.
- *Engage civil society* organizations and other participatory platforms¹³ in the implementation of action plans on tackling the epidemic.

C. Institutional mechanisms

1. Locate the national HIV/AIDS focal point in the office of the head of Government/State

For some countries, HIV/AIDS is a national emergency. For others, if prevention efforts are not significantly scaled up and made more comprehensive, it could become a national emergency. Either way, there is no room for complacency in the Asian and Pacific region.

The location of the national focal point for HIV/AIDS is a key indicator of the degree of support that it has from the highest authority in the land and its scope for effective action. When the head of Government/head of State is the focal point, as is the case in all emergencies,¹⁴ a strong political message is conveyed that action on HIV/AIDS has full national backing.

¹³ The World Bank's District Poverty Initiative Project, implemented in Andhra Pradesh, India, adopted an approach whereby funds were channelled through an autonomous society. Implementation of AIDS control programmes in the various states in India, through state AIDS control societies, is another example.

¹⁴ With the Prime Minister of Thailand as Chairperson of a similar committee, dramatic results were achieved.

Clear horizontal coordination across ministries can facilitate optimal resource deployment. This is possible only when the national focal point for HIV/AIDS is in the Office of the Head of Government/Head of State. Locating the national focal point in that Office signals to all ministries and government departments that HIV/AIDS ought to receive the highest consideration. Thus, it is extremely important to locate the national HIV/AIDS focal point under the direct leadership of the Prime Minister or the President.¹⁵

2. Constitute a national committee of ministers

An effective national response to the HIV/AIDS epidemic as a development issue has to be multiministerial (involving all relevant ministries) and multisectoral (involving government, non-governmental and corporate sectors). It has to have direct inputs from key ministries. The responsible ministries must also ensure that there is a smooth integration of the inputs into a cohesive national response. Each ministry must be held accountable, both internally and externally, to its counterparts in government. This may be realized through an inter-ministerial committee.

The committee may be composed of relevant ministries, such as health, education, finance, planning, urban and rural development, agriculture, information and broadcasting, industry and transport. It may be chaired by the head of Government/head of State and have the powers needed to ensure the development and implementation of a comprehensive national response to the epidemic.

3. Decentralize implementation of the national response

The national response to HIV/AIDS must also be multilevel. Ministries have a multilevel reach, often in different locations, starting from the national level to the provincial and local levels.

¹⁵ Developing countries that are successful in tackling the HIV/AIDS epidemic had their prime ministers/heads of State as leaders of the national AIDS programme, such as in Brazil, Cambodia, Senegal, Thailand and Uganda .

By definition, the national response to HIV/AIDS will also be an ensemble of constituent elements. For the best results, the response must be operationalized at different levels and be based on the principle that different layers of the national response are implemented by the agency which can best implement them or at the level at which they can be more effectively implemented.¹⁶

Furthermore, the national response must be sufficiently dynamic to allow for community-, local- and provincial-level variations. At the implementation stage, it must adequately reflect local needs and priorities, and be subsumed under the national response.

The national response must also be invested with administrative and financial flexibility, through delegation of authority and resources to implementing agencies, including personnel at different levels. This would ensure speedy implementation and rapid responses, wherever necessary.

4. Facilitate a wide network to implement the national response

The HIV/AIDS pandemic calls for highly diversified national responses. Various agencies and development actors, each with a comparative advantage and operating in diverse environments, can ensure efficient implementation of the national response. The implementation of the national response has to be entrusted to those agencies that have the greatest comparative advantage. Such agencies include government institutions, civil society groups and the corporate sector. This would be consistent with the decentralized implementation schemes suggested above.

5. Re-engineer government processes

Establish social auditing of HIV/AIDS programmes: Governments must identify institutions and organizations for conducting social audits of responses to HIV/AIDS issues and entrust them with the responsibilities and resources for this. To guarantee that the

¹⁶ The experience of the State AIDS Control Societies in different states in India is an example in point. See Government of India, Ministry of Health and Family Welfare Annual Report 2001-2002 (Government of India, 2002).

social audits are participatory, Governments must ensure the active involvement of PLWHAs and community members. The audit results must be disseminated to the public to improve transparency and accountability.

Governments must also establish and strengthen a credible system to monitor and evaluate the national response under the national committee of ministers. Furthermore, steps should be taken to foster a culture of taking prompt corrective action based on monitoring and evaluation.

D. Action on commitments

1. Implement commitments made in United Nations forums

Governments of the ESCAP region have committed themselves to fighting the HIV/AIDS pandemic. Recent commitments include those made at the fifty-seventh annual Commission session and the United Nations General Assembly Special Session on HIV/AIDS (2001). Regular review of achievements and lessons learned in implementing international commitments would provide information for further work. Based on such reviews, Governments should initiate action plans to complete the unfinished agenda of earlier commitments made to tackle HIV/AIDS, within a set time frame.

2. Strengthen regional cooperation for tackling HIV/AIDS issues

HIV/AIDS is a pandemic that respects no borders. The response of the United Nations has to be commensurate with the scale of this menace. Countries in the region have developed a wide range of expertise and have had varying levels of success in dealing with the epidemic. There is an urgent need to pool expertise and forge a regional alliance to work on HIV/AIDS issues. Sharing knowledge and resources and fostering a stronger sense of a common regional commitment to tackling the HIV/AIDS pandemic have to be essential components of any regional cooperation. Special attention has to be paid to issues that have particular significance for the region such as mobility, migration and trafficking.

E. Scaling-up of interventions

The region abounds in small-scale projects and programmes that have demonstrated success in responding to the HIV/AIDS epidemic and mitigating its impact. There has been commendable work by government agencies and civil society organizations. Experience shows, however, that unless the interventions are scaled up, the epidemic will not be halted.

Build on the gains achieved

Governments in the region must meet the following necessary and sufficient conditions to build on the gains achieved and scale up interventions to the national level.

The conditions *necessary* for meeting the challenge are as follows:

- *Earmark* funds for adequate investments to cover interventions for vulnerable groups, in addition to investments in other development sectors.
- Ensure the provision of an *acceptable minimum level* of preventive and promotive health care services, with *critical coverage* of target population groups.
- Create an enabling environment for those who are especially vulnerable to the epidemic to *access services* and facilities without any fear of discrimination and dire consequences.

It is also *imperative* that the following conditions for meeting the challenge be met:

- Clear *political commitment* at all levels to efficient resource mobilization and utilization.
- Strong *political will* to support and sustain policies and measures to tackle the epidemic, especially if they have a bearing on sensitive issues, such as the provision of health care to IDUs, sex workers and MSMs.
- A *policy environment* that addresses the epidemic as a development challenge, with interventions for tackling the epidemic that benefit young people and the poor in particular.

- Government agencies, civil society groups, community-based organizations must have the *capacity* and other institutions, to implement plans for dealing with the HIV/AIDS epidemic.

F. Epilogue

The Asian and Pacific region holds the key to the future of the HIV/AIDS pandemic. Governments of the region have a window of opportunity to act now and save millions of lives. Immediate action, at the highest decision-making levels, could protect the very people that Governments serve. Timely action can also prevent the unravelling of the region's economic and social gains. To *safeguard our common future* and that of the generations to come, great investments are required now, even in low-prevalence countries.

REFERENCES

- ADB (Asian Development Bank) (2001). *Education and National Development in Asia: Trends, Issues, Policies, and Strategies* (http://www.adb.org/Documents/Books/Education_NatlDev_Asia/enda.pdf, 8 March 2003).
- Agence France-Presse (1999). "Thailand-Myanmar-AIDS: Thailand and Myanmar urged to help seafarers or risk AIDS epidemic" (<http://ww2.aegis.com/news/afp/1999/AF990908.html>, 20 October 2002).
- Amadora-Nolasco, Fiscalina and others (2002). "Knowledge and perception of risk for HIV and condom use among male injecting drug users in Cebu City, Philippines", *Drug and Alcohol Review*, 21(2): 137-143.
- AMFAR (American Foundation for AIDS Research) (2000). "Special report: AIDS in Eastern Europe and Central Asia" (<http://www.amfar.org/cgi-bin/iowa/programs/globali/record.html?record=111>, 19 March 2003).
- Arora, Suchit (2001). "Health, human productivity and long-term economic growth", *Journal of Economic History*, 61(3), September (<http://www.paho.org/English/HDP/HDD/Arora.pdf>, 19 March 2003).
- Basuki, Endang and others (2002). "Reasons for not using condoms among female sex workers in Indonesia", *AIDS Education and Prevention*, 14(2): 102-116.
- Bjorkman, Hakan (2002). "HIV/AIDS and poverty reduction strategies", Policy Notes, August 2002 (New York, UNDP).
- Bloom, David E. and others (2001). "AIDS & economics" (http://www.riverpath.com/library/documents/aids_and_economics.htm, 20 March 2003).
- Bloom, David, River Path Associates and Jaypee Sevilla (2002). "Health, wealth, AIDS and poverty" (http://www.iaen.org/files.cgi/7053_Health_wealth_poverty.pdf, 20 March 2003).

- Bonnel, René (2000). "Economic analysis of HIV/AIDS", ADF 2000 background paper, The World Bank AIDS Campaign Team for Africa (http://www.iaen.org/files.cgi/435_HIVEconAnalysisADF.pdf, 20 March 2003).
- Brown, Tim (2001). "Dynamics of Asian HIV epidemics", paper presented at the Sixth International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 6 October, 2001.
- CIE (Centre for International Economics) (2002). "Potential economic impacts of an HIV/AIDS epidemic in Papua New Guinea" (http://www.aisaid.gov.au/publications/pdf/hivaids_png.pdf, 20 March 2003).
- Chin, James (2000). "HIV/AIDS projections for Asia", draft paper quoted in David E. Bloom, River Path Associates and Jaypee Sevilla, "Health, wealth, AIDS and poverty" (http://www.iaen.org/files.cgi/7053_Health_wealth_poverty.pdf, 20 March 2003).
- China Daily (2002). "China sees fast rise in HIV/AIDS carriers", *China Daily*, 20 November (<http://www.china.org.cn/english/Life/49298.htm>, 26 February 2003).
- Compendium of Reports (2001). "HIV/AIDS and development in Asia and the Pacific: a lengthening shadow", Asia-Pacific Ministerial Meeting, Melbourne, Australia, 9-10 October 2001 (Melbourne, The Australian Government's Overseas Aid Program).
- Crocombe, Ron (2001). *The South Pacific* (Suva, University of the South Pacific).
- Dhanani, Shafiq and Iyanatul Islam (2000). "Poverty, inequality and social protection: lessons from the Indonesian crisis", Working Paper 00/01, United Nations Support Facility for Indonesian Recovery.
- ECPAT International (n.d.). "What makes children vulnerable to sexual exploitation?" (<http://www.ecpat.net/eng/CSEC/faq/faq9.asp>, 20 March 2003).
- ESCAP (1999). *Economic and Social Survey of Asia and the Pacific 1999* (United Nations publication, Sales No. E.99.II.F.10).
- ESCAP (2002a). *Sustainable Social Development in a Period of Globalization: Challenges, Opportunities and Policy Options* (United Nations publication, Sales No. E.02.II.F.53).

- ESCAP (2002b). *Protecting Marginalized Groups during Economic downturns: lessons from the Asian Experience* (United Nations publication, Sales No. E.03.II.F.2).
- ESCAP (2002c). "HIV/AIDS and poverty: the impact of HIV/AIDS in the ESCAP region", Fifth Asian and Pacific Population Conference (E/ESCAP/PRUD/SAPPC/9).
- ESCAP (2002d). "Fertility levels and trends, and their implications for policies and programmes" (E/ESCAP/PRUD/SAPPC/2).
- ESCAP (2002e). "Population and poverty in Asia and the Pacific" (E/ESCAP/PRUD/SAPPC/1).
- ESCAP (2002f). *Economic and Social Survey of Asia and the Pacific 2002* (United Nations publication, Sales No. E.02.II.F.25).
- ESCAP (2003a). ESCAP information request questionnaire for the theme study for the fifty-ninth Commission session, Cambodia, China, Lao People's Democratic Republic, Papua New Guinea, Philippines, Thailand, Viet Nam.
- ESCAP (2003b). *Economic and Social Survey of Asia and the Pacific 2003* (United Nations publication, Sales No. E.03.II.F.11).
- ESCAP (n.d.). ESCAP virtual conference, The Orangi Pilot Project (http://www.unescap.org/drpad/vc/conference/ex_pk_5_opp.htm, 21 March 2003).
- ESCAP/UNDCP/UNAIDS (2001). *Injecting Drug Use and HIV Vulnerability: Choices and Consequences in Asia and the Pacific* (Bangkok, ESCAP).
- Family Health International, François-Xavier Bagnoud Center for Health and Human Rights of the Harvard School of Public Health and UNAIDS (1996). "The status and trends of the global HIV/AIDS pandemic", Report presented at the XI International Conference on AIDS, Vancouver, Canada, 7-12 July 1996.
- FAO (2001). *The State of Food Insecurity in the World 2001* (Rome, FAO).
- Farooq, Ghazi (2000). "HIV/AIDS and STDs: Causes, Consequences and Preventive Programmes", Occasional Paper Series No. 8 (Bangkok, UNFPA Country Technical Services Team for East and South-East Asia).

- Fogel, Robert William (1993). Economic growth, population theory, and physiology: The bearing of long-term processes on the making of economic policy, Nobel Lecture, December 9, 1993 (<http://www.nobel.se/economics/laureates/1993/fogel-lecture.pdf>, 21 March 2003).
- Frost, Lizz and Vladimir Tchertkov (2002). "Prisoner risk taking in the Russian Federation", *AIDS Education and Prevention*, 14 (Supplement B): 7-23.
- Gangakhedkar, R. and others (1997). "Spread of HIV infection in married monogamous women in India", *JAMA*, vol. 278, No. 23, pp. 2090-2092, 17 December, 1997.
- Government of India, Ministry of Health and Family Welfare (2002). Annual Report 2001-2002 (New Delhi, Government of India).
- Guinness, Lorna and others (n.d.). "Modelling the impact and cost effectiveness of CARE-SHAKTI: an HIV prevention programme for injecting drug users and safe sex workers in Bangladesh", unpublished.
- Gupta, Geeta Rao (2000). "Gender, sexuality, and HIV/AIDS: the what, the why, and the how", paper presented at the XIIIth International AIDS Conference.
- Hamoudi, Amar A. and Jeffrey D. Sachs (1999). "Economic consequences of health status: a review of the evidence", Harvard University, Center for International Development Working Paper No. 30, December 1999.
- Hasan, Aynul (2001). Role of human capital in economic development: some myths and realities, *Development Planning in a Market Economy*, Least Developed Countries Series, No. 6 (United Nations publication, Sales No. E.02.II.F.24).
- Hasan, M. Aynul and Ajaz A. Rasheed (1999). "Efficiency and optimal allocation of education inputs: a case study for the Punjab school system", *The Current State of Economic Science*, vol. 4, pp. 1950, (Rohtak, Spellbound).
- Human Rights Watch (2002). *World Report 2002* (<http://www.hrw.org/wr2k2/contents.html>, 21 March 2003).
- ILO (1995). "The impact of HIV/AIDS on the productive labour force in Africa", Working Paper No. 1 (Addis Ababa, ILO).

- Im-em, Wassana and others (2002). "HIV/AIDS-related knowledge and attitudes: a comparison of older persons and young adults in Thailand", *AIDS Education and Prevention*, 14(3): 246-262.
- IRIN News (2002). "Iran: focus on intravenous drug usage and HIV/AIDS" (<http://www.irinnews.org/report.asp?ReportID=31165>, 26 February 2003).
- Jordan, Ann D. (2000). "Commercial sex workers in Asia: a blind spot in human rights law", *Women and International Human Rights Law*, vol. 2, 2000, pp. 525-585.
- Keith-Reid, Robert and Mere Tuqiri (2002). "AIDS in Tuvalu", *Pacific Magazine with Islands Business: South Edition*, June, p. 11.
- Kang, Sung Jin and Yasuyuki Sawada (2002). "Household coping strategies and the financial crisis in Korea" (http://www.iser.osaka-u.ac.jp/seminar/2002/Sawada_Sept_18.pdf, 21 March 2003).
- Khan, M. Asaduzzaman (2002). "Knowledge on AIDS among female adolescents in Bangladesh: evidence from the Bangladesh demographic and health survey data", *Journal of Health, Population and Nutrition*, 20(2): 130-137.
- Kumaranayake, L. and others (2000). "Cost-effectiveness of HIV preventive measures among injecting drug users (<http://www.unaids.org/bestpractice/digest/files/costbelarus.html>, 27 February 2003.)
- Li, Chen Sheng and others (2002). HIV/AIDS in China: Survey Provides Guidelines for Improving Awareness, *Asia-Pacific Population & Policy*, No. 62, July 2002.
- Lisk, Franklyn (2002). "Labour market and employment implications of HIV/AIDS", Working Paper 1, ILO Programme on HIV/AIDS and the World of Work (Geneva, ILO).
- MAP (Monitoring the AIDS Epidemic) (2001). *The Status and Trends of HIV/AIDS/STI Epidemics in Asia and the Pacific* (Washington, United States Bureau of the Census).
- Marseille, Elliot and others (2001). "The cost-effectiveness of HIV prevention in developing countries", extracted from background material prepared for the Leadership Forum on HIV Prevention, 22 June 2001 (<http://ari.ucsf.edu/pdf/CostEffectiveness.pdf>, 21 March 2003).

- Mayer, David (2001). "Health, economic growth, and poverty traps" (<http://www.paho.org/English/HDP/HDD/Mayer.pdf>, 21 March 2003).
- Mehrotra, Santosh (2000). "Integrating economic and social policy: good practices from high-achieving countries, Innocenti Working Paper No. 80, (Florence, UNICEF Innocenti Research Centre).
- Ministry of Public Health, Thailand (1999). "The impact of the Asian financial crisis on the health sector in Thailand" ([http://www. ausaid.gov.au/publications/pdf/health_thailand.pdf](http://www.ausaid.gov.au/publications/pdf/health_thailand.pdf), 21 March 2003).
- Mukhopadhyaya, Pundarik (2002). "Crisis, social sector and income distribution in some South-East Asian countries", Working Paper 161 (Singapore, National University of Singapore) (<http://www.hhs.se/eijs>, 21 March 2003).
- NACO (National AIDS Control Organisation), Ministry of Health and Family Welfare, Government of India (2001). National Baseline General Population Behavioural Surveillance Survey 2001, (Delhi, Ministry of Health and Family Welfare, Government of India).
- NCHADS (National Center for HIV/AIDS, Dermatology and STDs), Ministry of Health, Cambodia (2000). "Report on HIV sentinel surveillance in Cambodia 1999 (draft)", Phnom Penh, May 2000.
- Newell, Marie-Louise (2001). Prevention of mother-to-child transmission of HIV: challenges for the current decade, Bulletin of the World Health Organization, 2001, 79(12) ([http://www.who.int/bulletin/pdf/2001/issue12/79\(12\)1138-1144.pdf](http://www.who.int/bulletin/pdf/2001/issue12/79(12)1138-1144.pdf), 21 March 2003).
- Pasha, Hafiz A., and others (1996). "Integrated social-sector macro-econometric model for Pakistan", *The Pakistan Development Review*, 35(4), part II (Winter 1996) (Islamabad).
- Pitayanon, S., S. Kongsin and W.S. Janjareon (1997). "The economic impact of HIV/AIDS mortality on households in Thailand", in D. Bloom and P. Godwin, eds., *The Economics of HIV and AIDS: The Case of South and South East Asia* (Delhi, Oxford University Press).
- Podhisita, Chat and others (1996). "Bridge populations in the spread of HIV/AIDS in Thailand", *AIDS*, 10:1265-1271.

- Quibria, M.G. (2002). "Growth and poverty: lessons from the East Asian miracle revisited", Asian Development Bank Institute Research Paper 33, February 2002 (<http://www.adbi.org/PDF/wp/rp33.pdf>, 21 March 2003).
- Reid, Gary and Genevieve Costigan (2002). "Revisiting the hidden epidemic: a situation assessment of drug use in Asia in the context of HIV/AIDS" (Fairfield, Australia, The Centre for Harm Reduction, The Burnet Institute).
- Rhucharaenpornpanich O. and A. Chamrathirong (2001). "Demographic impact of AIDS on the Thai population", *Asia-Pacific Population Journal*, 16(3): 71-88.
- Robalino, D., C. Jenkins and K. El Maroufi (2002). "Risks and macroeconomic impacts of HIV/AIDS in the Middle East and North Africa: why waiting to intervene can be costly", World Bank Policy Research Working Paper 2874, August 2002 (http://econ.worldbank.org/files/16774_wps2874.pdf, 21 March 2003).
- Rogers, Susan J. and others (2002). "Reaching and identifying the STD/HIV risk of sex workers in Beijing", *AIDS Education and Prevention*, 14(3): 217-227.
- Russian Federal AIDS Centre (2002). "HIV-infection cases reported among Russian citizens by main risk factors, 01.01.2002-30.06. 2002", (<http://www.afew.org/English/epi/HIVTransmRoutes.php>, 21 March 2003).
- Sarkar, Swarup (2000). "Harm reduction in the developing countries: next decades", presentation at the 11th International Conference on the Reduction of Drug Related Harms, New Jersey, 2000.
- Sarkar, Swarup, Anindya Chatterjee and Anne Bergenström (2003). Forthcoming paper on drug-related HIV interventions in South and South-East Asia.
- Schwartlander, B. and others (2001). "Resource needs for HIV/AIDS", *Science*, 29 June 2001, 292(5526):2434-2436.
- Seluka, Alesana K. (2002). Tuvalu statement at the United Nations General Assembly special session on Children (<http://www.un.org/ga/children/tuvaluE.htm>, 28 December 2002).
- SEWA (n.d.). Orangi Pilot Project on Urban Development (1980-93), Karachi, Pakistan (<http://www.ahmedabad.com/incity/info/develop/sewa.htm>).

- Shetti, Vandana (2001). "Health systems development in Asia: rising to the challenge of Health for All" (www.hpair.org/research/hpair01/workshop4briefing.pdf, 26 February 2003).
- Simbulan, Nymia P. and others (2001). "High-Risk behaviours and the prevalence of sexually transmitted diseases among women prisoners at the women state penitentiary in Metro Manila, *Social Science & Medicine*, 52(4): 599-608.
- Sison, Marites (2001). "Health-Philippines: Wives close eyes to seafarers' casual sex, Inter Press Service (<http://www.aegis.com/news/ips/2001/IP010510.html>, 28 December 2003).
- Stover, John and others (2002). "Can we reverse the HIV/AIDS pandemic with an expanded response?", *The Lancet*, vol. 360, No. 9326, pp. 73-77, 6 July 2002.
- Sussangkarn, Chalongphob, Frank Flatters and Sauwalak Kittiprapas (1999). "Comparative social impacts of the Asian economic crisis in Thailand, Indonesia, Malaysia and the Philippines: a preliminary report". *TDRI Quarterly Review*, vol. 14, No. 1, March 1999.
- UNAIDS Asia Pacific Intercountry Team, ed. (1997). Inventory of HIV/AIDS information sources in the Asia-Pacific region.
- UNAIDS (1998), (2000), (2002a). *Report on the Global HIV/AIDS Epidemic* (Geneva, UNAIDS).
- UNAIDS (2001). "New report sounds alarm over AIDS in Asia" Press Release 2001 (http://www.unaids.org/whatsnew/press/eng/pressarc01/MAP_041001.html, 21 March 2003).
- UNAIDS (2002b). "Financial resources for HIV/AIDS programmes in low- and middle-income countries over the next five years", Programme Coordinating Board, thirteenth meeting: Lisbon, 11-12 December 2002 (http://www.unaids.org/about/governance/files/PCB13_FinancialResources_en.doc, 26 February 2003).
- UNAIDS (2002c). HIV/AIDS, Human Resources and Sustainable Development, World Summit on Sustainable Development, Johannesburg, 26 August – 4 September 2002 (Geneva, 2002).
- UNAIDS (2002d). Factsheet 2002: Asia and the Pacific (http://www.unaids.org/worldaidsday/2002/press/factsheets/FSAsia_en.doc, 27 February 2003).

- UNAIDS (2002e). HIV/AIDS in Asia Pacific: opportunities and challenges, unpublished paper (Nagoya, 28 November 2002).
- UNAIDS (2002f). Papua New Guinea: Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections, 2002 Update (http://www.unaids.org/hivaidsinfo/statistics/fact_sheets/pdfs/Png_en.pdf, 21 March 2003).
- UNAIDS, UNICEF and USAID (2002). *Children on the Brink 2002: A Joint Report on Orphan Estimates and Program Strategies* (Washington, TvT Associates).
- UNAIDS/WHO (2000). *Guidelines for Second Generation HIV Surveillance* (Geneva, UNAIDS/WHO).
- UNAIDS/WHO (2002). *AIDS Epidemic Update December 2002* (Geneva, UNAIDS/WHO).
- UNDCP Regional Centre for East Asia (1995). "Background brief: UNDCP subregional programme in East Asia" (Bangkok, UNDCP Regional Centre for East Asia).
- UNDCP (1997). *Community based approaches to drug demand reduction: a selective review of project results among the MOU countries* (Bangkok, UNDCP Regional Centre).
- UNDP (2001a). *Compilations of Examples from Thailand: People's Development: A Community Governance Tool* (www.hiv-development.org/publications/people-development.asp, 21 March 2003).
- UNDP (2001b). HIV/AIDS: Implications for poverty reduction, background paper prepared for UNGASS on HIV/AIDS, 25-27 June 2001. Quoted from Compendium of reports, 2001.
- UNDP (2002). *Report of the Workshop on the Brunei, Indonesia, Malaysia, Philippines, Singapore Cluster Country Consultation on Migrant Workers' HIV Vulnerability Reduction. Pre-departure, Post-arrival and Returnee Reintegration, September 2002.*
- UNDP and others (n.d.). "Land transport and HIV vulnerability: a development challenge" (http://www.synergyaids.com/documents/3889_050102_LandTransport.pdf, 21 March 2003).
- UNESCO (2000a). "Asia-Pacific EFA assessment" (<http://www.unesco.bkk.org/infores/efa2000/rconf.htm>, 21 March 2003).

- UNESCO (2000b). *The EFA 2000 Assessment: Country Reports, Pakistan* (http://www2.unesco.org/wef/countryreports/pakistan/report_2.html, 28 February 2003).
- UNESCO (2001). *Monitoring Report on Education for All, 2001* (Paris, UNESCO).
- UNESCO (2002). *EFA Global Monitoring Report 2002: Is the World on Track?* (Paris, UNESCO).
- UNFPA (2002). *The State of World Population 2002* (New York, UNFPA).
- UNICEF (2002). *Every Last Child: Fulfilling the Rights of Women and Children in East Asia and the Pacific* (Bangkok, UNICEF).
- UNICEF, UNAIDS and WHO (2002). *Young People and HIV/AIDS: Opportunity in Crisis* (New York, UNICEF).
- United Nations Country Team in Cambodia (2002). *Developmental implications of HIV/AIDS* (Phnom Penh, July 2002) (http://www.un.org.kh/FILES/HIV_Document.pdf, 21 March 2003).
- United Nations (1996). *Time to act: The Pacific Response to HIV and AIDS* (Suva United Nations).
- United Nations (2001a). *World Population Prospects: The 2000 Revision. Volume I: Comprehensive Tables* (United Nations publications, Sales No. E.01.XIII.8).
- United Nations (2001b). "Declaration of Commitment on HIV/AIDS: Global Crisis – Global Action" (<http://www.un.org/ga/aids/coverage/FinalDeclarationHIVAIDS.html>, 24 March 2003).
- United Nations (2001c). "Secretary-General calls for national leadership and local involvement in fight against HIV/AIDS, at Conference of Council of Foundations" (www.un.org/News/Press/docs/2001/sgsm7783.doc.htm, 26 February 2003).
- United Nations (2001d). "Secretary-General proposes global fund for fight against HIV/AIDS and other infectious diseases at African leaders summit" (www.un.org/News/Press/docs/2001/SGSM7779R1.doc.htm, 26 February 2003).
- Wooten-Bielski, K. (1999). "HIV & AIDS in older adults", *Geriatric Nursing*, 20(5): 268-272.

World Bank (2002). Regional updates, South Asia region – Nepal (<http://wbln1018.worldbank.org/sar/sa.nsf/d722d09e93ee6888852567d7005d7b35/cfbd2f443829f97085256a9b00536ad1?OpenDocument>, 5 March 2003).

World Bank (n.d.). "Social policy and governance in the East Asia and Pacific region: activities in Malaysia (<http://www.worldbank.org/eapsocial/countries/malay/proj1.htm>, 28 February 2003).

World Bank (2000). "Economic analysis of HIV/AIDS", Annex 5 to Multisectoral HIV/AIDS Programme (MAP) (Washington) and Intensifying Action against AIDS in Africa: Responding to a Development Crisis (Washington, World Bank).

WHO (2001a). *Macroeconomics and Health: Investing in Health for Economic Development. Report of the Commission on Macroeconomics and Health* (Geneva, WHO).

WHO (2001b). *HIV/AIDS in Asia and the Pacific Region* (New Delhi and Manila, WHO).

كيفية الحصول على منشورات الأمم المتحدة

يمكن الحصول على منشورات الأمم المتحدة من المكتبات ودور التوزيع في جميع أنحاء العالم. استلم منها من المكتبة التي تتعامل معها أو اكتب إلى : الأمم المتحدة، قسم البيع في نيويورك أو في جنيف.

如何购取联合国出版物

联合国出版物在全世界各地的书店和经售处均有发售。请向书店询问或写信到纽约或日内瓦的联合国销售组。

HOW TO OBTAIN UNITED NATIONS PUBLICATIONS

United Nations publications may be obtained from bookstores and distributors throughout the world. Consult your bookstore or write to: United Nations, Sales Section, New York or Geneva.

COMMENT SE PROCURER LES PUBLICATIONS DES NATIONS UNIES

Les publications des Nations Unies sont en vente dans les librairies et les agences dépositaires du monde entier. Informez-vous auprès de votre libraire ou adressez-vous à : Nations Unies, Section des ventes, New York ou Genève.

КАК ПОЛУЧИТЬ ИЗДАНИЯ ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ

Издания Организации Объединенных Наций можно купить в книжных магазинах и агентствах во всех районах мира. Наводите справки об изданиях в вашем книжном магазине или пишите по адресу: Организация Объединенных Наций, Секция по продаже изданий, Нью-Йорк или Женева.

COMO CONSEGUIR PUBLICACIONES DE LAS NACIONES UNIDAS

Las publicaciones de las Naciones Unidas están en venta en librerías y casas distribuidoras en todas partes del mundo. Consulte a su librero o diríjase a: Naciones Unidas, Sección de Ventas, Nueva York o Ginebra.

Printed in Bangkok
April 2003 – 1,615



United Nations publication
Sales No. E.03.II.F.24
Copyright © United Nations 2003
ISBN: 92-1-120164-0
ST/ESCAP/2251